

AMERICAN RAILROAD JOURNAL, AND ADVOCATE OF INTERNAL IMPROVEMENTS.

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AMERICAN RAILROAD JOURNAL, &c.

NEW-YORK, JULY 5, 1834.

The citizens of Taunton, Mass., are about constructing a branch from that place, to meet the Boston and Providence railroad—distance about 10 miles—probable expense \$80,000.

NEW LOCOMOTIVE.—By the ship New-York, the Saratoga and Schenectady Railroad Company have received another Locomotive Engine in addition to the one now in use on their road. It is from the celebrated manufactory of Stephenson & Co., and will probably be ready for operation in the course of ten days.

IRON WHEELS.—We saw a waggon in Court street this forenoon, which, from the novel construction of the wheels, excited considerable curiosity in the passers-by. They were made entirely of iron—the outer part of the wheel was formed from a single piece of iron about an inch and a half square—the spokes were round, and five-eighths of an inch in diameter. The naves were constructed in a new and ingenious manner, by which the friction is much diminished; and the whole appearance of the wheels conveyed the idea of usefulness, neatness, and simplicity.

On inquiry, we learned that these wheels were calculated to sustain a weight of a ton and a half—and that wheels of the ordinary construction, to sustain so great a weight, would weigh about the same as these newly invented wheels. The expense also, we were informed, will not vary materially from those in common use. They were manufactured by Mr. Hale, of South Boston; and we believe this is the first attempt of the kind to manufacture all the parts of the wheel of iron. The advantages to be derived from this invention are neatness, safety, and durability.—[Boston paper.]

RAILROADS IN VIRGINIA.—We fully agree with our correspondent as to the importance of the two, or more properly *one*, railroads to which he refers in the following communication, and we trust we have good reason to anticipate an early movement towards their construction. Virginia has, it is true, done very little towards the improvement of her natural advantages—too little, indeed, for the station she has always maintained amongst the States of the Union; but we think we perceive the dawn of a better day for her. Petersburg has led the van; Norfolk is following her, and Richmond must in self-defence do something, or she will be left so far behind as not to be thought of in the same day; and she will hardly stand that. Richmond will attend to the construction of a railroad to Fredericksburg, Fredericksburg to the Potomac Creek, and then Petersburg or Richmond, or both, will finish the chain by making a railroad between those two towns, which will intersect the State.

RAILROADS IN VIRGINIA.
To the Editor of the Railroad Journal.

There are two works in Virginia of the most useful and important character, but which will not be undertaken for some time yet to come, on account of the want of energy or interest of the citizens of that section of the country in their completion. They are railroads, one from Ck. Landing to Fredericksburg, (a little over ten miles in length), and the other from Fredericksburg to Richmond (about sixty miles.) They are on the great southern mail route from Washington City to New-Orleans, and are, (the former more particularly), essentially necessary to the speedy transportation of the mail and passengers. From Fredericksburg, (a distributing post-office), the mail routes diverge to Maysville and Guyandotte westward, and southward to Richmond, Norfolk, Petersburg, Charlottesville, &c., into North and South Carolina, Georgia, &c. The mail at present is conveyed in steamboats from Washington to Potomac Creek, (a tributary to the Potomac river), 60 miles, and thence in stages to its various destinations; and owing to the miserable state of the roads throughout Virginia, more particularly during the winter—(I refer you to the far-famed poem of Moore's, on

his ride over a portion of them, for a better description than I could give)—there is no calculating with certainty on the arrival of the stages at the proper time, or of their bringing the mails with them when they do come, (notwithstanding the extra allowances of our worthy postmaster.)

A survey for a railroad from Potomac creek landing to Fredericksburg, was made in the spring of 1832, and the line located across the peninsula, dividing the waters of Potomac and Rappahannock rivers. From some cause or other, only a common turnpike was constructed over a portion of the line, and the attention of the citizens generally, and of the Legislature, being too much absorbed at the time by the James River and Kanawha Canal, to feel interested in any other work of internal improvement, very little of the stock of this road was subscribed for, and no interest felt for its construction. The report of the engineer who surveyed and located this road, not having been printed, I cannot procure a copy, of which I should like to send you one, as it contained much statistical information respecting that section of the country. Yours, respectfully,

H. N. C.

HUDSON AND ERIE RAILROAD.
To the Editor of the Railroad Journal.

I find, from the late numbers of your Journal, that there is some prospect of an entire survey being made of the Hudson and Erie Railroad. The feelings of the citizens of the lower part of the state have led them to determine on the route of this railroad through the lower tier of counties, without probably reflecting on the possibility of a better, cheaper, and more practicable route elsewhere, for accomplishing their object. Upon reference to a map, you will find that the streams watering that section of the country generally run parallel to each other, with lofty and continuous ridges of mountains between them. These ridges are most generally unbroken, affording no opportunities for the passage of a railroad, except at an immense expenditure of money for stationary power, more, in fact, than could be warranted, I think, by the travel and transportation over such a route, for years, at least, to come. Why not then seek for the best location of such a work, without limiting the researches of the engineer to one particular route

within the confines of a portion of one state? Instead, for instance, of commencing at Tappan or Nyack, and crossing the Catskill mountains, where there are several continuous and successive ridges to be crossed, and all (or most of them undoubtedly) requiring separate stationary engines (and some of them several) to overcome the ascent, start from opposite the city of New-York, and taking the route of the Hudson and Paterson railroad to Paterson, (where you have even now a road constructed to your hand by way of commencement,) turn northward, thence following up the valley of the Rancoces, a branch of the Passaic, (I think,) and crossing, at the most suitable place, the ridge dividing it from the valley of the Ramapo, up which you pass into Orange county. The Deer Park Gap, in the Neversink mountains, would here be a good place for crossing that range into the valley of the Neversink river, down the valley of which will lead to the Delaware river. Here you can follow up the valley of the Delaware nearly to the New-York and Pennsylvania line, and finding the most convenient crossing place, pass the intervening ridge to the waters of the Susquehanna; thus on to lake Erie.

These hints I throw out more as an inducement to those interested, to give to the engineer unlimited power to locate the road over the best route, whether passing through New-York alone, or passing into New-Jersey and Pennsylvania, than through any certainty on my part of its being better than any other. It will moreover become a national road in a great measure, and the wishes of the citizens of the lower counties of New-York can be gratified by the construction of lateral roads into the several counties, (following the valleys of the several streams to effect that object,) and the object of a road better fulfilled by giving a wider sphere for the action of the road, and more extended means of increasing its resources after its construction.

Take these hints as a basis for any remarks you may wish to make on the subject. I have hardly time to throw them into proper shape for publication. Yours, respectfully,

H. N. C.

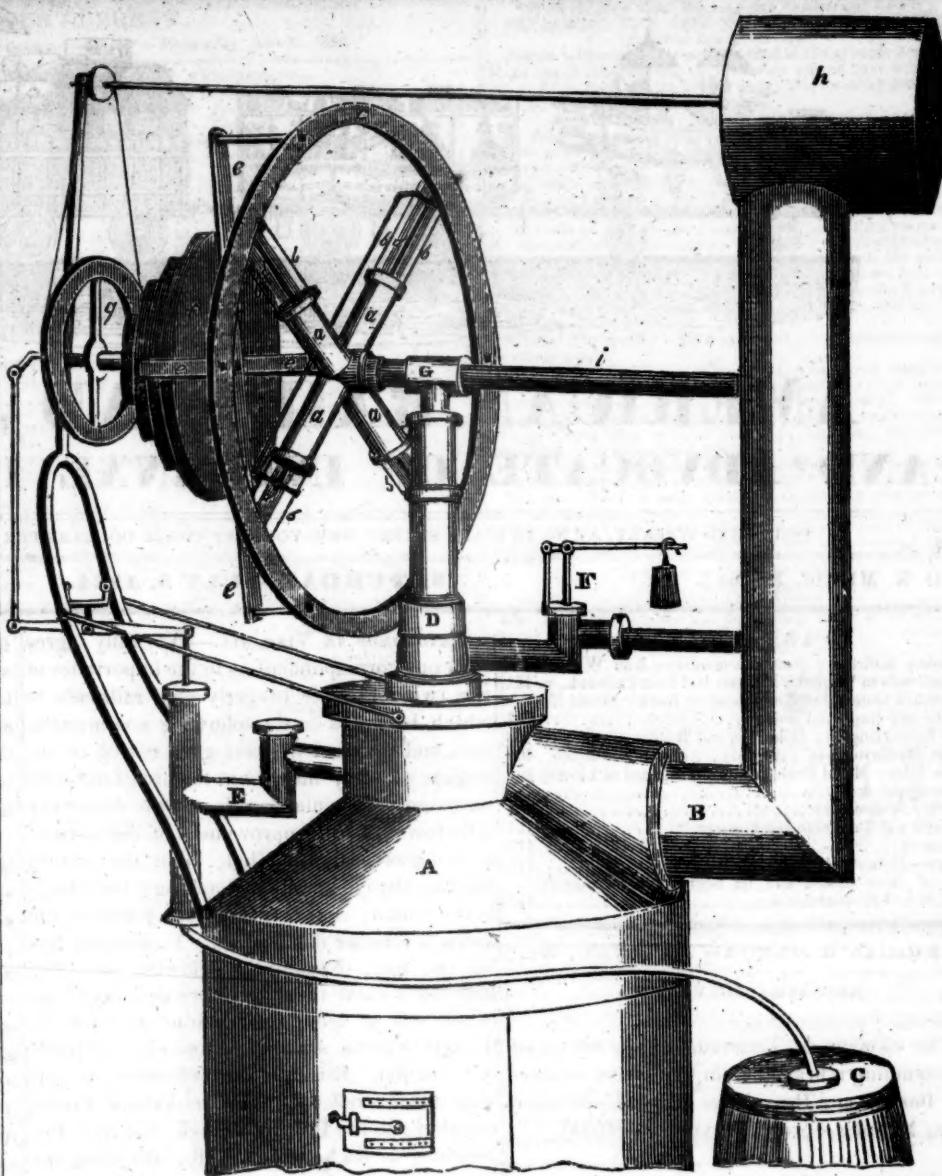
A Compound Reciprocating Rotary Steam Engine, and an Improved Boiler, invented by SIMON FAIRMAN, of Lansingburgh, New-York. [From the Mechanics' Magazine and Register of Inventions and Improvements.]

This engine and boiler may be used separately, or the two together, as may be most convenient; the engine may be connected with any other boiler, and the boiler with any other engine.

This invention presents to the public, in a fair and practical form, the long-sought *desideratum* of a steam engine producing a rotary motion, without undue complication and liability to disorder; without the inconvenience of fly wheels and cranks; and giving the full power of steam without being subject to the constant loss of impetus by the action and re-action of heavy masses of metal.

It will be easily discovered, by examining the drawing, that this engine and boiler, when connected together, will occupy but a very small portion of the space required by the engines and boilers of the same power in common use, and that the weight of both engine and boiler are equally reduced; and as the cost, especially of the engine, is also reduced, at least in the proportion to its size and weight, it follows of course that, in all cases where a rotary power is wanted, it must be entitled to a preference equal to all those savings and conveniences, and for all locomotive purposes, still much greater.

And it must be no less obvious, on in-



specting the plan of the boiler, that, besides its compactness, it is capable of producing a given quantity of steam with less fuel than is required for the boilers now in use.

As in the annexed drawing the engine and boiler are connected together; and, as to communicate an idea of the boiler, it was necessary to give a sectional view, showing the form of the inside, the description will require a kind of mixed reference alternately from one drawing to the other.

A, figure 1, represents the boiler entire, the inside of which is explained by figure 2. The furnace door is shown in figure 1, through which the fuel is inserted into the furnace, b, figure 2. The water is contained in three concentric double hollow cylinders, numbered in figure 1—1, 2, 3. It is received from the supply pump, E, figure 1, into the outer cylinder, No. 1, and passes thence through bent tubes, a, a, into the inner cylinder, No. 3, which forms the furnace, from which it passes through the tubes, c, c, figure 2, into the centre pan at the top, d, which pan is connected with the middle cylinder, No. 2, from which enclosure and pan it goes through the upright or main conductor, D, figure 1, to the engine.

The fire goes from the furnace, b, and the top of the inner cylinder, thence down between that and No. 2, and, passing under No. 2, goes up between that and No. 1, and

out through the small pipe, B, figure 1; and, when necessary, the draught is accelerated by a blower in the cylinder, n. The bottom of the furnace has a grate and ash pan, which need no description.

The spaces between the double cylinders, and in the centre pan, in which the water and steam are contained, are shaded in the sectional view, and the furnace and spars between the cylinders through which the fire passes are left white.

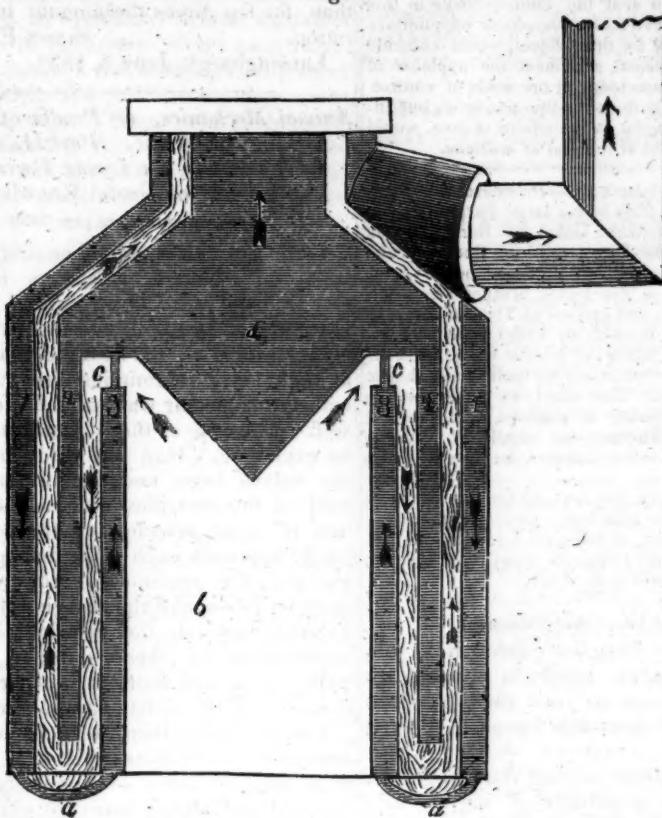
C, figure 1, represents the water tank; F, the safety valve; G, the horizontal pipe forming part of axis, through which the steam is conducted to and from the engine.

a, a, a, a, are four cylinders, in all respects similar to those of the common reciprocating steam engine; which cylinders stand at right angles with each other, with their bottoms resting upon a cylindrical hub, or centre; the cylinders of course forming a cross.

b, b, &c. are the slide rods, part of which only are seen. The bottoms of the slide rods are attached to the flanges round the tops of the cylinders, and their tops to a rim of cast iron, c, which rim also steadies and supports the tops of the cylinders by four straps, or parts of arms, d, d, d, d, which are bolted to the tops of the cylinders.

e, e, e, e, are four arms, connected with said rim by studs of sufficient length to leave

Fig. 2.



room between said arms and the cylinders for the connecting rods to revolve, and to which arms is attached the main or driving pulley, *f*, or in place thereof a cog-wheel, as the case may require.

The connecting rods and cross-heads being mostly hid in the representation, are so nearly in the common form as to need no description. But the feet of the said connecting rods are connected together by a moveable joint, so as to revolve round a centre-pin, which is removed from the centre round which the cylinders revolve, just half the length of the stroke of the pistons.

The steam is conducted through a hole lengthwise in the main axis *G*, and out through a hole in the side thereof into the bottom of each cylinder successively, as they revolve.

On the side of each cylinder is a tube, passing from the bottom to the top, and also connected at the bottom with that which lets the steam into the bottom of the opposite cylinder, so that when the steam is let into the bottom of one cylinder it enters the top of the one opposite; and as the feet of the connecting rods revolve round a centre at some distance from the centre of the main axis, as the pistons act and re-act, the cylinders must of course revolve round the axis; and when each cylinder has passed round to the opposite side from whence it filled, the steam escapes through a hole on the opposite side of the axis into a hole lengthwise of the axis, and parallel to the one by which it entered, and goes off through the discharge pipe *i*.

Mr. F. will engage to construct an engine and boiler of fifty horse power, of strong and permanent workmanship, which (both engine and boiler) shall stand on a circle of six feet diameter, and will not vary much in weight from three tons. And operating with a steady rotary impulse and without any jar, its operation will be much pleasanter in steamboats, and also prevent the injury done

to the boats by the constant racking motion of the engines now in use.

This engine and boiler will be in operation in a few days at 240 Water street, New-York.

Since the above was in type, we have received the following from Mr. Fairman:

To the Editor of the Mechanics' Magazine:

SIR.—However I may be reduced, by the misfortune, or rather the folly, of having undertaken to invent useful mechanical improvements, my pride is not so far overcome as to be willing to ask any services on the score of charity; but if, from any other motive, you should see fit to give this a place in your Magazine, I wish you better remuneration for so doing than to meet the fate of an inventor.

I had long been led to believe that a *rotary* steam engine, simple, operative, and sure in its construction, with an efficient boiler, both so compact, and consequently light, as not to overburthen their own power, and peculiarly adapted to locomotive purposes, was a desideratum for which the enlightened public would liberally reward the inventor, if such an inventor could be found. I had good authority for so believing. Many respectable writers on the subject of steam power, have noticed the importance of such an invention, but all I have seen have considered it impracticable.

Mr. Nicholson, in his *Operative Mechanic*, (Philadelphia edition, page 206,) says: "All steam engines, as yet noticed, have their action by the movement of a piston, in a cylinder, and act by what is called a reciprocating motion. In engines of this description a very considerable degree of power is expended in arresting the motion of the different working parts, and putting them into action in a contrary course. This has claimed much attention of engineers, and

many attempts have been made to construct an engine in which the action of the steam should operate in a continuous manner, without bringing the parts to a state of rest."

Again he remarks, (page 213,) "The reciprocating motion in steam engines is a loss of power, which cannot be denied, for the momentum of the beam and other parts, passing in one direction, have suddenly to be arrested and moved in the opposite direction, which produces a loss of power.

"Rotary action has been sought, therefore, with propriety, but has not yet been attained with advantage."

Since Mr. Nicholson wrote the foregoing, the importance of locomotive steam power has nearly doubled, and yet I have known of no attempt which was likely to succeed in effecting the desired object.

With these views of the subject, and believing, or at least hoping, it was practicable, I undertook, and have no hesitation in stating, that I have effected all that the subject required. I have constructed an engine and boiler as little liable to disorder, and as easily kept in repair, as any other, and, I believe, with at least double the power, in proportion both to the cost and weight, of any which has come to my knowledge.

But my want of pecuniary means compelled me to let the engine and boiler which formed the first experiment, and which could not be expected to be perfect, go out of my control, and be placed where, by awkward management, if it be not condemned, it will discredit rather than benefit the invention. No man of judgment would expect perfection in a first experiment; but fortunately there was no mistake perceived in the engine, and but for a slight miscalculation in the boiler, I would not wish my reputation to stand, as an inventor, on a better foundation.

I cannot now invest the necessary sum in materials to exhibit my invention to the public, but if any gentleman or company interested in procuring the best locomotive engine and boiler, after due examination of my plan, will furnish materials, I will hazard all the labor of constructing them at short notice, and will guarantee, as far as my labor goes, that they shall not vary essentially from the following calculations:

A boiler, which shall expose 160 feet of heating surface to the water, and shall possess sufficient strength to work steam under 100 lbs. pressure to the inch above the atmosphere, and which, of course, must produce a sufficiency of steam for a fifteen or sixteen horse power; an engine with 4 cylinders, 6 inches diameter, 18 inch stroke, making four double strokes at each revolution, and 50 to 60 revolutions per minute, working off from 78 to 94 feet of steam.

The whole engine, boiler and furnace, shall only occupy a circular space of three feet six inches diameter; and shall weigh less than a ton. A boiler and furnace sufficient for a fifty horse power shall stand on a circle six feet in diameter.

All which facts are respectfully submitted by the public's humble servant,

SIMON FAIRMAN.

P. S.—I have no wish nor reason to find any fault with the conduct of the gentleman in whose hands my steam engine is placed in New-York. I have found nothing ungentlemanly or unfair in his conduct. The only difficulty is, the engine was taken away prematurely.

S. F.

The Steam Engine.—Security against accidents from the explosion of steam, being a subject of such extreme interest to the community, we insert the annexed report, made to the House of Representatives on the 26th ult., by Mr. White, of Louisiana, from the select committee to which was referred the memorial of Benjamin Philips of Philadelphia, who suggests a contrivance by which the double advantage is obtained of increasing the power of the engine, and at the same time preventing mischief from explosion.—[Nat. Intel.]

The Select Committee to which was referred the memorial of Benjamin Philips, of Philadelphia, report: The object of the memorialist is to invite the attention of Congress, and the public generally, to certain improvements devised by him in the use and structure of the steam engine. The model of his apparatus accompanied by drawings and diagrams, illustrative of its principles, have been submitted and examined. Whatever other advantages may be supposed to be combined in the scheme, the committee have considered it chiefly, if not exclusively, in reference to its comparative safety, or exemption from the danger of explosion.

It seems to be a point conceded by scientific observers, that, among the primary causes of explosion in steam boilers, one of the most prominent may be traced to the want of a constant and regular supply of water, while the engine is in action. The usual means employed, as the committee are advised, both for supplying the consumption of the boiler, and for ascertaining the quantum of water in that receptacle, are inadequate and uncertain. The forcing pump is liable to derangement; and when the water has fallen so low as to superinduce the circumstances of danger, neither the common gauge-cock, nor the common safety valve, can be relied on for an accurate indication of the state of things so essential to be known. By the plan submitted, these effects appear to be remedied. A constant and uniform supply of water, and a test water gauge, indicating to the eye, at any moment, the precise level of the fluid in the boiler, form a part of the melioration suggested.

But what appears to the committee to be the distinguishing feature of the plan, is that it contemplates the employment of the steam at any given pressure, without a corresponding stress on the boiler. The result is obtained by generating the steam at a very moderate pressure on the boiler, from whence it is conveyed for use, to one or more receivers, in which, before it is applied as the momentum to the engine, it may be raised by flues heated from a separate furnace, to any required degree of elasticity.

The committee are of opinion, that if the scheme be feasible, of which they do not doubt, it must of itself be an important step towards the GRAND DESIDERATUM. Confined in a separate reservoir, not in immediate connexion with the boiler, the steam, however rarefied, would not be liable to be suddenly injected with water, a process which all concurring experience proclaims to be the proximate cause of many of the most dreadful accidents that have occurred.

The form and position of the contemplated receiver is believed to present another condition of security. Placed vertically on the deck, with different chambers or compartments connected by valves, the steam at its greatest tension naturally rushing through the valves into the upper chambers of the recipient, if ever explosion should take place, it would be a mere effusion of steam, and not of heated water; and the discharge would be upwards, into the open air, leaving untouched the passengers and the property embarked in the vessel.

There are other particulars in the mechanism, of the usefulness of which, practical engineers alone are competent to form an accurate estimate. It will suffice to say, that as a whole, the committee consider the contrivance as reflecting credit on the science and ingenuity of the proprietor, and that his plan is worthy of a full and fair experiment.

On the question as to the power and the inexpediency of aid and co-operation on the part of the Government in experiments of the kind, the committee have come to an affirmative conclusion. When it is considered how intimately the subject matter connects itself with the general welfare, looking to the protection of the lives and property of the whole people, that it involves considerations of naval and national defence, as well as the general interests of commerce, it is not thought that any valid opposing argument can be drawn from the want of power, much less objection be raised on the score of policy.

The committee have thought proper to recommend

a small sum to be placed at the disposal of the Secretary of the Navy, to test the improvements in this branch. It is believed that a reasonable expenditure of the public money for this subject, would coincide with the universal sense, and meet the applause of the nation. The knowledge of the mode of controlling and directing with safety this powerful, but hitherto dangerous, agent in the affairs of men, would be cheaply purchased at the cost of millions.

TRENTON, (N. J.) JUNE 28.—*Delaware and Raritan Canal.*—On the 25th inst. a large Barge from the Delaware and Chesapeake Canal, left Bordentown in the morning, with the Directors of the Company and a number of the Stockholders on board, on an excursion of inspection of the locks, bridges and other works of the canal, and arrived at Trenton about 12 o'clock. She then went up the feeder as far as Lambertville. On the following day the Barge, with the Directors, &c. proceeded on the main canal hence for New Brunswick. The canal, we understand, is now open for the passing of shallops, &c. from the Delaware to the Raritan—the supply of water is good, and appears to be abundant for a depth of 6 and 7 feet.

A large supply of water was let into the Canal of this Company on the 24th inst. On the night following, the embankment on the west side near the Aspangpink, gave way, occasioning a heavy breach, which will take a week or more to repair.

[From the *Lansingburgh Gazette*.]

MR. EDITOR,—I beg leave through the medium of your paper, briefly to notice several communications in your two last numbers, of which I have the honor to be the subject.

I utterly disavow having knowingly in my composition a particle of ingratitude; and as I have no reason to doubt that the pieces alluded to were dictated by a spirit the most friendly for my interest, I as sincerely reciprocate to them every kind feeling which grateful sympathy can dictate.

I am well aware, however, from long observation, confirmed by a good share of experience, that whoever attempts to lessen the burden of Labor, or render it more productive, by the invention of a labor-saving machine, not only sets himself up as a mark, like a man in the pillory, for men of feeling to pity, and fools to throw rotten eggs at, but puts himself upon a fair chance to end his days in a poor-house or a prison; and I have the mortification to confess that something, which I have reason to fear is a radical defect in my constitution, has placed me among that unfortunate class of beings called inventors.

But I beg leave to state, that inventors, (poor wretches,) have feelings, and sometimes even pride, as well as other people; and as I have a little share of that added to my other misfortunes, I wish those respected friends of mine to consider that it cannot but be painful to me to be exposed as an object of public sympathy. I have been foolish enough to invent some labor-saving improvements, and men have been benefitted by them who seldom thanked me, and much more seldom paid me; and it is true, I have lately invented and constructed a *steam engine*, on a plan which, whatever may be its mechanical force, will force its way into use, and will benefit the world when I am forgotten.

And it is equally true, that it has found its way out of my hands, without any fair compensation; but, thank Heaven, I still enjoy health, and strength, and air, and sometimes sun-shine, as plentifully, perhaps, as if I had never invented any thing; and if Heaven will continue me these blessings, and my friends will favor me with such jobs as will occupy my time, and keep me from committing any more acts of invention, I

will thank them more for such patronage than for ten times the amount in compensation.

SIMON FAIRMAN.

Lansingburgh, June 3, 1834.

Animal Mechanics, or Proofs of Design in the Animal Frame. Part II., showing the Application of the Living Forces. [From the Library of Useful Knowledge.]

(Continued from page 343.)

Here we find a very beautiful muscular apparatus which is necessary to the perfect adjustment of these cords. The cords are attached to small muscles called *columne carnea*, C C, or fleshy columns, which at their other extremities are incorporated with the muscular wall of the ventricle itself. The use of these muscles is now to be explained. Had the tendinous cords of the valves been tied to the inside of the wall of the ventricle, without the intervention of these muscles, as the walls of the cavity approach each other during their contraction, the tendinous cords would have been let loose, and the margins of the valves carried back into the auricle. But, by the intervention of these muscles, they are pulled upon and shortened in proportion as the sides of the cavity approach each other.

On the whole, then, we perceive that this apparatus, which is as intricate as the rigging of a ship, consists of a variety of fleshy columns and cords, many of which, in fact, run across the cavity of the ventricle.

We are about to exhibit another form of a valve, much simpler, and yet we are bound to believe equally effectual; which tends to support the opinion expressed above, that besides preventing the retrograde motion of the blood, this intricate apparatus of the ventricle is intended more effectually to agitate and to mix the different streams.

At the root or origin of the great artery, called the *Aorta*, there is a firm ring, to which the valves now to be described are attached. The necessity of this will appear evident, since, if the ring could be stretched by the force of the heart's action, the valves or flood-gates would not be sufficient to close the passage; their conjoined diameters would not equal that of the artery which they have to close. These valves are three in number: they are little half-moon shaped bags of thin membrane, which are thrown up by the blood passing out from the ventricle, but by the slightest retrograde movement of the blood, their margins are caught, and then, being distended or bagged, they fall together and close the passage. There are some curious little adjuncts to these valves, which ought to be explained, as shewing the accuracy of the mechanical provision.

When the margin of the valve is thrown up by the blood passing out of the heart, it is not permitted to touch or fall flat upon the

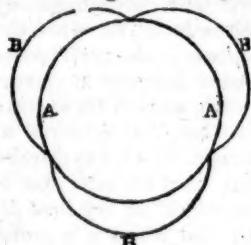
Fig. 5.



side of the artery, for, if it did, it would not

be readily caught up by the blood that flows back; there is, therefore, a little dilatation of the coats of the artery behind each valve, by which, although the margins of the valve be distended to the full circle, they never cling to the coats. These valves, then, are never permitted to fall against the coats of the artery, and therefore they are always prepared to receive the motion of the reflected blood.

Fig. 6.



Let this figure represent a transverse section of the root of the aorta: A A, the inner circle, is the margin of the three valves thrown up to let the blood pass. B B B are three semi-circular bags, formed by the dilatation of the coats of the artery at this part, receding from the margin of each of the valves—consequently, in such a manner as to leave a space between the valves and the sides of the vessel.

To strengthen the valves, a tendon runs along their margin, like the bolt-rope or foot-rope along the edge of a sail, and these ligaments are attached to the side of the artery, and give the valve great strength.

Fig. 7.



These valves, we have said, are semi-lunar, consequently, when they fall together there must be a space, A, left between them. If we put the points of the thumb, fore and middle fingers, together, there is a triangular space left between them; such a space between the convexities of the three valves would be a defect.

Fig. 8.



This figure represents the artery open, and the semi-circular valves, like little bags, attached to the inside.

Three little bodies like tongues are therefore attached to the middle of the margin of each valve, and these, falling together when the valve is shut down, perfect the septum and prevent a drop of blood passing backwards.

GLASS TILES.—M. Dorlodot, a glass manufacturer, at Anzin, in France, has invented a species of glass tile, of great solidity and transparency, which, it is thought, may be substituted with much advantage in all cases where skylights are now employed. The existing excise

laws of Great Britain oppose, however, an insuperable bar to their adoption in this country, unless under circumstances where expense is no object.—[Mechanics' Magazine.]

MORAL PRINCIPLES THE SAFEGUARD OF LIBERTY.—The following from the Scottish Guardian, although not correct in all its statements or reasoning, deserves, says the Annals of Education, deep reflection, and we have been gratified to see it circulating extensively through our newspapers.

Two Magistrates of Paris recently made a tour through the United States, and in the course of two years collected important information regarding the statistics of crime and education. In the state of New-York, 500,000 children, out of two millions, are at public schools; that is, a fourth part of the population, and £240,000 are annually expended for this purpose. Yet in this State crime increases, and that, too, though the means of subsistence and employment are so much more easily obtained than in any other countries. In Connecticut, education is still more extended, and nearly a third part of the population is at school. Yet crimes multiply to a frightful extent. The Journal of Education, stating these facts, draws this cautious conclusion: "If knowledge cannot be accused of causing this increase of crime, at least it has not prevented it."

On turning to France, and examining tables of the comparative proportion of instruction in its different departments, during a period of three years, the western and central provinces have been found the most uneducated—15, 14, 13, 12, and 8 per cent. only being able to read and write; but, according to an essay on the moral statistics of France, presented to the Academy of Sciences, the minimum of crime is to be found in these uneducated departments, and the maximum in Corsica and in the southeastern provinces, and in Alsace, where nearly half the population can read. The different employments of the population may account for the difference in part; yet still we may again draw the cautious conclusion, that if education has not caused, at least it has not been seen to prevent crime.

The only ascertained moral effect of intellectual education was stated in last March by the Lord Chancellor, in the House of Lords. In Russia, where education can scarcely be said to exist, out of 5,800 crimes committed within a certain period, 3,500 were accompanied by violence; while in Pennsylvania, where education is generally diffused, out of 7,400 crimes, only 640 were accompanied by violence, being in the proportion of $\frac{1}{12}$ of the whole number, instead of $\frac{3}{5}$, as in the former case. Thus the only ascertained effect of intellectual education on crime is to substitute *fraud* for *force*—the *cunning* of civilized, for the *violence* of savage life. Nor would even this small change be permanent. A highly intellectual community, without moral principles and the habits of self denial which religion imposes, would only prove a sleeping volcano, ready to awaken every moment, and overthrow those very institutions under which it had been fostered. To increase the intellectual power, and enlarge the knowledge, of a man void of principle, is only to create in him new desires, to make him restless and dissatisfied, hating those that are above him, and desirous of reducing all to his own level; and you have but to realize universally such a state of society, to fill the cup of the world's guilt and misery to the brim. What do we say then? Not certainly that education is to be withheld from any member of society, —for that question is now decided, whether we will or not,—but that from the infant school, upwards to the university, it must be a thorough *Christian* education, in which our youth shall be trained in the ways of virtuous self-control, and piety and righteousness wrought into the understanding and into the whole habit of man. A perfunctory religious

education will no longer serve—not mere Bible reading—but Bible education. The understanding must be enlightened, and the heart must be gained over to the side of truth and righteousness. In short, *the grand aim of education* must become, not merely the formation of intellectual habits, or the acquisition of secular knowledge, (as is too exclusively the case in present times,) but the formation of the Christian character. Men have hitherto been prone to take for granted, that it was only necessary to teach the art of reading, and before this new power all vice and error would flee away. These are dreams of men ignorant of themselves, and ignorant of our poor nature. Men must be trained to piety and virtue as they are trained to any other habits, whether intellectual or physical; and the moral man must advance contemporaneously with the intellectual man, else we see no increase from our increased education, but an increased capacity for evil doing.

The following application of this truth to our own country and its peculiar dangers, from the Northampton Courier, is another gratifying evidence of the increased interest taken in the subject.

"We believe that there is much truth and justice in the remark, that other influences besides that of force must be exercised, to keep the Union of these states permanently together. Statutes may be enacted, constitutions framed, and interests multiplied, but if there is not a primary feeling of moral obligation and fraternal duty, to cement and enforce them, the duration of this government, like all others, is extremely questionable and uncertain. Pecuniary interest, and common defence, and general prosperity, are but transient ties, which can be thrown off to suit the excited spirit of the times, or changed to meet any pressing emergency. They are but selfish bonds, which yield at the rude touch of popular disaffection, and are easily rent by the misguided voice of public sentiment, and vindictiveness, and clamor. But if legal enactments and obligations, and physical wants, and common defence, do not constitute security against dissolution, what influences can be exerted to sustain and strengthen a civil compact of such stupendous weight and importance as our own? If these things fail, what iron will enter the souls of men, to enforce their moral obligations, and to impress upon them the maxim of 'union,' with certain safety and security?

We think a *moral* obligation, and religious feeling, and fraternal affection, which is founded in the heart, and has its emanations from the soul, if rightly cultivated, will insure this purpose, and guarantee its permanent duration. Some deep abiding sentiment, some strong affection of the mind, some radiating influence from the heart, which rises above selfishness, and pecuniary wants, and sordid interest, which all feel and acknowledge, is what should be cherished and cultivated, to bind with adamantine chains the different parts and sections of this our own favored country together.

Yes; it is by cultivating the sense of 'moral obligation and religious feeling,' and the 'fraternal affection,' which is their necessary concomitant and result, that our own union is to be maintained, (for we are unwilling to add the qualification which is chilling so many hearts,) and not by constitutions of parchment, or even by the arm of power. If our laws are not supported by our feelings, and principles, the force which we use to maintain them, may indeed make us *fellow prisoners*, or *fellow subjects*, but never can unite us as *brethren* or *fellow citizens*. France has long sought to establish moral principle on some other basis than that of Christianity; but she has renounced this visionary plan, and now requires the *New Testament* to be employed as the text book of morals and religion in every school in the empire. Let us profit by her example, and retain the precious legacy of our purer, happier ancestors.

AGRICULTURE, &c.

CULTURE AND EXTRAORDINARY PRODUCTIVENESS OF THE *OXALIS CRENATA*.—We are indebted to the Quebec Mercury for the following interesting article :

This vegetable has been newly introduced in England, and on the limited experience a brief acquaintance with it has enabled those who have cultivated it to acquire, it is regarded as a plant of considerable promise and well worth attention. It is cultivated by tubers, and we have great pleasure in adding another instance of greater feeling with which the efforts of our new Quebec Society for the Improvement of Agriculture are encouraged by societies, having the same purpose in view, in the mother country, in announcing that some tubers of this plant have been forwarded to its Society, by the Royal Devon and Cornwall Botanical and Horticultural Society, accompanied by the fourth annual report of their Committee, from which we extract the following notice of the *Oxalis Crenata*.

"It is cultivated by tubers, which being furnished with eyes like those of the potato, may, like it, be divided into several cuttings; but, as the substance of the tuber is the magazine destined by nature to sustain the plant till it acquires sufficient strength to draw its nutriment from the soil, it will perhaps be advisable not to make the division too small, or rather to plant the tubers whole, and reverse the division till after the plants have acquired such a size as to be independent of the nutriment of the parent tuber. While their culture is restricted to the limited operations of the garden, and perhaps also even after they have attracted the attention of the farmer, Mr. Beaton recommends making the tubers germinate in pots protected from the severities of the early spring; a practice which will facilitate the subsequent division just recommended. They should not be planted out in the open ground till the advancing season has removed all danger of severe frost. When transplanted, they should be put in ground well dug and rendered permeable to their roots, and should not be set closer than from four to six feet apart. They will grow well, as Mr. Beaton observes, in any light soil, but a very rich soil is best for a heavy crop. The best method of planting would perhaps be to set them between drills, the earth of which may from time to time be brought down over them with a hoe. The thick succulent stems which are thrown up in profusion during the summer make excellent tarts, resembling those of rhubarb or gooseberries, but requiring less sugar; while the leaves are a grateful food to many domestic animals, and the tops and smaller branches may be employed as cuttings to extend its culture, and augment the production of tubers. Cuttings of this kind, stuck in the open ground without any peculiar care, as late as the 26th of last October, were found, when examined on the 16th of the following month, not only to have thrown out radical fibres, but to have commenced the formation of tubers. The plants flower during the greater part of August and beginning of September, and when covered with a profusion of golden blossoms, make a handsome appearance in the flower garden. Cuttings taken at this time, even when loaded with flowers, root freely, and produce their tubers at the usual season. In October the production of tubers commences, and such is

the profusion with which they are thrown out, that, in rich soils, they not only fill the ground to the exclusion of every thing else, but frequently even form on the stems above the surface of the ground. As the production of these tubers does not appear to commence at present earlier than the first of October, and as their growth and production may be affected by cutting the herbage after that day, it would be worth while to determine the question by a careful examination of the produce of two plants growing in circumstances perfectly similar, the herbage of one of which had been cut after this period, while that of the other was left untouched. The herbage when cut during the summer months is rapidly reproduced; and Mr. Beaton states that on the 27th of last September he obtained no less than ten pounds' weight of green food from a single tuber, planted six feet apart from any other. He considers this herbage as superior in summer to every other kind of green fodder for cattle.

Attempts having been made to discourage the experiments now prosecuting for the purpose of ascertaining the real value of the *Oxalis crenata*, as an article of sustenance for man, as compared with other productions of a similar nature, the secretary of the Horticultural Society feels it his duty, as a friend to every improvement calculated to add to the comforts of the poor, and provide for the wants of our increasing population, without attempting to give any positive opinion, or create hopes which may terminate in disappointment, to lay before the society from time to time such facts as may come to his knowledge from authentic sources, accompanied with such suggestions as those facts may present; distinguishing, however, the facts from the theory, and leaving his readers to estimate the value of the latter from the details of the former. On the 7th of April, a tuber of the *Oxalis crenata*, weighing only 28 grains, was planted in an old cucumber bed, in a garden on the east side of Plymouth. About five weeks after, two offsets were taken from it and planted separately in the common soil of the garden. The parent plant grew with surprising vigor, and soon spread over an elliptic space, the transverse diameter of which measured three feet seven inches, and the conjugate diameter three feet one inch. Early in November, the proprietor, having accidentally disturbed the ground, broke off a few tubers from one of his plants, which he cooked, and found to be most delicious, resembling the flavor of a mealy potato, without the slightest trace of acidity. On the night of the 25th and the morning of the 26th November, there was a smart frost, which injured the herbage of the plants, and from which they did not again recover. On the 14th of December, he at length took up the roots, when he found the produce to be as follows :

Parent plant, 407 tubers, weighing 7 lbs. 8 oz. 14 dr. 22 gr.
Two off-sets, 198 " " 3 8 0 0

Total, 605	11	0	14	22
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being a return of no less than *two hundred and seventy-five thousand per cent.*, a return almost unparalleled in the annals of horticulture. Of these tubers, one, now in the possession of the secretary, who will be happy to show it to any desirous of examining it, displays the singular form of a compressed cone, or rather triangle, two of whose sides measure one inch and six-eighths, while the remaining

side measures two inches, so that it is as nearly as possible equilateral, with a thickness of nearly six-eighths, and weighs 300 grains, or nearly 14 times the weight (28 grains) of the tuber originally planted; this *one tuber* alone being a return of no less than 1392.86, or nearly 1393 per cent. The time occupied from the planting to the digging did not exceed 251 days, or the time usually required for the potato to bring its tubers to perfection, and there is reason to believe that this period might have been advantageously shortened by a month or more, for when the proprietor tried the tubers in the early part of November, they were superior in flavor to the best potatoes, while some of those dug on the 14th of December last, had acquired more or less of an acid taste, which was disrelished by many. It has been already observed that the plants were cut off by the frost of the 26th of November, after which it is probable that the growth of the tubers, *as to size*, ceased to advance, and nothing consequently was gained by leaving them in the ground—but as the frost was followed by a succession of warm humid weather, favorable to vegetation, it appears probable that, although ceasing to advance in size, the tubers, or many of them, began to germinate; now the process of germination, as in the familiar instance of malting, is well known to be accompanied with the formation of sugar, from the absorption of oxygen, both from the decomposed humidity and from the surrounding atmosphere, by the farinaceous portion of seed. In plants, however, whose product, in place of being saccharine, is a peculiar acid, as in the family of the sorrels, it is not improbable that the combination of the oxygen during the progress of germination, with the farinaceous portion either of the seeds or roots, forms that peculiar acid which, from the genus by which it is furnished in the greatest abundance, has been termed the oxalic acid; and hence, those tubers which, prior to the 26th of November last, were perfectly sweet, became subsequently, from the commencement of germination or malting, more or less acid according to the degree of progress made. This hint, founded perhaps upon an erroneous analogy, is merely thrown out for the purpose of calling attention to the subject, eliciting information from those more competent to supply it, and removing any unreasonable prejudice which may have been created in the minds of those who have tasted the tubers at an improper stage of their growth. As for those whose fears may have been alarmed by the information that oxalic acid exists in the *oxalis crenata*, it is but just to relieve their apprehensions by stating that the acid does not exist in its deleterious state, but in the form of a neutral salt, the super oxalate of potassa, whose effects, in the common wood sorrel of the hedges (*Oxalis acetosella*), the sorrel dock (*Rumex acetosella*), and other similar vegetables freely used as salads, are eminently anti-scorbutic and beneficial to the health.

It is stated that the tubers of those plants of the *oxalis crenata*, which have blossomed, are larger and better than those of plants which have not flowered: the fact, if correct, is important, and deserves inquiry, especially as the reverse is said to happen in the case of the potato (*Solanum tuberosum*)."

ON THE PRESERVATION OF POTATOES.—Potatoes at the depth of one foot from the

ground, produce shoots near the end of spring; at the depth of two feet, they appear in the middle of summer; at three feet of depth, they are very short, and never come to the surface; and between three and five feet, they cease to vegetate. In consequence of observing these effects, several parcels of potatoes were buried in a garden at the depth of three feet and a half, and were not removed till after intervals of one and two years. They were then found without any appearance of germination, and possessing their original firmness, freshness, goodness, and taste.—[Ann. Soc. d'Agrie.]

CHURNING BUTTER.—Not many days since, on entering the house as usual about dinner time, I found my family very much perplexed about the cream which they had been churning for about two hours, and yet no signs of butter. On examination I found the cream was worked into a perfect *froth*. I was satisfied that unless something could be done to change its nature or condition, churning would be useless: I therefore threw into the churn as much common salt as I could hold in my right hand; I then put the churn in motion, and in 15 minutes, by the clock, the butter had perfectly separated from the milk.—[Ohio Farmer.]

SILK.—The Connecticut Silk Manufacturing Company are to receive \$11,500, to aid and encourage them in establishing a silk factory; Messrs. Gay and Bottum, mechanists of Lisbon, \$2,000, as a remuneration for their labor and expense in inventing and constructing silk machinery; the Mansfield silk factory, \$1,500; the State House yard, \$8,000, and the remaining \$2,000 goes into the State Treasury.—[Hartford Review.]

MANURE FROM HOGS.—This is the season for farmers to avail themselves of every opportunity to collect every substance that can be made into manure. Let every farmer look about him and endeavor to find sources of increasing his manure. The following is from the Northern Farmer:

One of the regular means which every farmer possesses, for the increasing of his stock of manure, and which is by no means the least valuable, is by many totally neglected. It is that of making their hogs serviceable in this business. Upon this point, I can speak from past experience, both in respect to the loss from neglect and the advantages derived from these valuable animals, when employed for this purpose. It was my practice, till within the last fifteen years, to permit my swine to roam at large in the highway, in the summer season; or what was but little better, confine them in a pasture, for three or four months during the warmest of the season; carrying whatever I might have to give them as feed, to the place in which they were confined. I began, however, after a while, to consider this course of turning hogs to pasture, or permitting them to run in the highway, to be altogether wrong. Upon mature reflection, I concluded that by confining them in a close yard, and furnishing them with the materials for making manure, the profits would be amply sufficient, not only to repay me for all the trouble of furnishing the materials, but would also enable me to give them better keeping; and, in this respect, my anticipations have been fully realized. One er-

ror, however, I committed in the outset, and I have noticed the same fault in others. It was this: my yard was at first made at least three times too large, embracing about two and a half rods of ground, for three or four hogs, the number which I generally keep; and I have seen yards including a much larger space made by some farmers, for an equal number of hogs. Now this, where the object is the making and saving manure, is, in my judgment, wrong; for, in so large a space, the quantity of materials put into the yard must be very great, or it must lie very thin over the yard; in either case, the benefit received from three or four hogs is but small, at least I found it so, where the materials, of whatever nature they might be, were put in one season and carried out the spring following. I therefore diminished my yard to twenty feet by fourteen, about one-third of its original dimensions; and I find this space to be sufficiently large for four hogs; and, I believe, large enough for even six to make manure to advantage; for in this space, materials sufficient for twenty or twenty-five loads of manure may be deposited in the course of one season; and what to me seems of the first importance in this business, is the hogs are kept continually on the materials, except when in their house, for the purpose of eating and sleeping.

My method of supplying these materials is the following: after having cleared their yard at the season of planting, I put into it such portions of straw as I may have left on hand after the season of foddering is past; and if I have not a sufficient quantity of this, to furnish the necessary supply till vegetable substances attain to a sufficient growth to be profitably collected, I put in earth collected from the low places, by the side of the highway; though this I more generally place in or near my barnyard, in a situation to receive and retain the wash that might otherwise escape from that. Brakes and weeds of any kind are valuable. These I make use of to the extent they are obtainable, when in a green state; as I consider green vegetable substances, for this purpose, far more valuable than dry. Potato tops when pulled for early use, before they become dry and shrivelled, I consider equal if not superior to any other green substances for this purpose. Pea-vines I usually put into my hog yard, after the peas are threshed off; and if some are put in before being threshed, they are as gratefully received by the inmates of the yard. Buck-wheat straw I have made use of, but I deem this to be of all substances the least valuable for the purpose of making manure, when it has ripened into a dry state, however valuable it may be when ploughed under in a green state, as it unquestionably is; being at that stage of its growth one of the most juicy plants of the vegetable kingdom.

I add nothing by way of materials to my hog yard, after the first of September, at which time I generally commence feeding, for the purpose of fattening; and by the middle or twentieth of December, my usual time for killing my hogs, I make from four to five loads of manure to each hog so kept, superior to the summer dung, obtained by yarding my cows. And the quantity made by my hogs is for each one double to that made by each cow for the same period of time.

Thus I have endeavored to present to the readers of the Farmer my method of adding to my stock of manure by the aid of my

hogs from fifteen to twenty loads annually: whereas, I used formerly, as too many do at the present day, who call themselves farmers, entirely to neglect all these advantages, the improvement of which is so essential to profitable farming. It is to be hoped, however, that no farmer, who has the opportunity of reading an agricultural paper, is so remiss, in relation to that which is so conducive to his best interests. MATTHEW BUELL, JR.

Newport, May 31st, 1834.

HOEING CORN.—After such an unfavorable spring as we have had this year, the hoeing of early planted corn is rather a disagreeable employment than otherwise.

When the soil is of a clay loam, and was early ploughed and planted, after which were heavy rains, and the soil has become hard, and the corn looks pale and sickly, it is often abandoned as not of sufficient promise to compensate for the labor of cultivation; but young farmers should remember, that after they have done their duty by carefully ploughing and hoeing, much depends upon the weather, during the months of July and August, for producing a good crop of corn, and although the plants may continue stunted during much of the month of June, yet if the ground is kept in good condition, a fine crop may be realized.

Many are apt to say, in case of dry weather, during the month of June, "that the ground is so dry that it will do corn more hurt than good to hoe it." Never mind, if the ground is dry, stir it the more, it is the best way to guard against drought; in short, do not neglect hoeing, for stirring the ground without manuring is better than manuring without stirring.—[Goodsell's Genesee Farmer.]

EFFECTUAL SECURITY AGAINST THE BEE MOTH.—As soon as your bees commence working in the spring, examine your hives, and with a slab of wood, or piece of hoop iron, scrape the stand immediately under the hive, also around the inner edges of the box, taking care to remove all the web that may be attached to any part of the stand or hive, as the whole secret consists in keeping them free from the web formed by the moth or fly. Having completed this operation, provide yourself with four square blocks of wood, and place one under each corner of your hive, so as to raise it not quite half an inch from the stand; this will enable you to clean the stand without removing the hive. This scraping operation must be repeated every three or four days, if there should be any appearance of web forming on the stand, or around the inner edges of the hive. It seems necessary to remark that the moth or fly makes its attacks by a kind of regular approach, first forming its web on the stand, and then extending it up the sides of the hive until it gets complete possession. By a little attention in cleaning the stand and hive, as directed, you will certainly secure your bees from the ravages of the worm. In the winter, the blocks must be removed from under the hive, so as to allow it to rest immediately on the stand, which will secure it against the attacks of mice, &c. On this plan, it is advisable to make an entrance for the bees by cutting a perpendicular slit, in the front of the hive, half way from the bottom, say two and a half inches in length, and one-eighth of an inch wide, with a kind of a shelf just under it, to serve as a resting place for the bees going and returning to the hive. After being a little used to it, the bees seem to prefer this entrance to the one at the bottom of the hive. This plan has proved an effectual security against the worm, after every other remedy has failed; and not a single hive has been lost since it was adopted.

Z.

MANGOLD WURTZEL, OR FIELD BEET.—We are happy to find that farmers are awake to the cultivation of this crop, and so great has been the increase of demand for seed, that it has

THE COILING SYSTEM OF CULTIVATING GRAPE VINES IN POTS.—At page 164, we inserted an article on this interesting system. We subjoin some additional facts from the Gardener's Magazine.

This coiling system is certainly a completely new feature, and, I think, a very valuable one, in the art of grape-growing. Is it not a matter of great importance that, in consequence of my discovery, a gardener, who may go to a situation, in the autumn, where no grapes have previously been growing, may be enabled to produce there easily, for the ensuing season, from 500 to 1000 bunches of fine grapes? All that is wanting to enable any gardener, so circumstanced, to do this, are the prunings of the vines from any garden, that would otherwise be thrown away, and, of course, a convenient frame, pit, or house, for growing them in. If abundance of shoots can be produced, and there is a sufficient extent of frames, &c., either temporary or permanent, two, three, or five thousand bunches may thus be produced in a garden where grapes were never seen before.

The coiling system is nothing more than taking a long shoot or cutting from a vine, cutting out all the buds except a few at the upper end, and then beginning at the lower end, and coiling the shoot round and round, say from three to six or eight times, the inside of a pot of 12 or 14 inches or more in diameter. The shoot may be of any length, from 6 feet to 30 feet, and it may be entirely of last year's wood; or the greater part of it may be of old wood, provided 3 or 4 feet at the upper end be of new wood; because, as every gardener knows, the buds from young wood are more certain than those from old wood of producing blossoms the first year. The vine being coiled round in the pot, and plenty of drainage being put in the bottom, take care that the end of the shoot left out of the pot, on which the fruit is to grow, be not injured at the point where it separates from the coil. This shoot may be 2 or 3 feet long; and to keep it steady, it may be tied to a stake, or coiled round two or three stakes. After this, fill up the pot with a rich loamy soil, pressing it firmly against the coil, as if you were making firm the end of a cutting. Unless this is done in such a manner as to bring every part of the coil in close contact with the soil, it will not root so readily as it otherwise would do. The next operation is, to wrap up all that part of the stem which is above the pot with moss, and this moss must be kept constantly moist till the grapes are formed. The pot should now be plunged in bottom heat, either in a pit or forcing-house; but, wherever it is plunged, care must be taken to regulate the temperature of the atmosphere of the house, in such a manner as to prevent the top of the vine from being excited before the roots. If this should happen, the young shoots produced will soon wither for want of nourishment. Abundance of air, therefore, should be given for several weeks, so as never to allow the temperature of the atmosphere of the house, frame, or pit, to exceed 45 or 50 degrees, while the temperature of the medium in which the pots are plunged may be as high as 65 or 70 degrees. When, by examination, you find that fibres are protruded from the coil, the temperature of the atmosphere may then be gradually raised when the buds will break, and the shoots will grow apace.

The shoots proceeding from that part of the stem above the pot should be led up to within 8 or 10 inches of the glass, and there trained, at that distance from it, towards the back of the pit or house. It is needless to state to the practical gardener, that each shoot will require to be shortened, free from laterals, &c. Each vine will produce from three to twenty or more bunches, according to the length of coil and variety of grape. I have now (Jan. 17, 1834), upwards of 200 coiled branches in pots, and nearly fifty of them in action; some with twenty bunches of fine grapes upon them.

I was asked the other day, whether vines so

treated would not require frequent shifting into larger pots; or, at least, to be shifted once a year. To this I answered, that while we had a plentiful supply of prunings from our own vines, or could procure them from those of our friends, the best mode would be to treat the plants, after they had borne one crop, as we do the roots of asparagus, and other plants that we force: that is, to throw them away. If, however, you should wish to keep the coiled plants a second year, and the pots should be found to be too full of roots, turn out the ball, shake the soil from the coil, and cut away all the roots close to the shoot; then repot it as before. If this be done in winter, the plant will produce an excellent crop the following season; probably a better one than if the roots were allowed to remain, and the ball shifted into a larger pot or box. The pot or box is in either case soon filled with young vigorous fibres, like a hatch of young maggots, each eager for food, and consequently sending it up in abundance to supply the crop above. Can there be a doubt but that this is a far superior mode to keeping pots, or even fruit tree borders, filled up with old inert roots?

Before my bunches are clearly developed, I have thousands of eager mouths or spongiæ, extending along the coiled shoot, and each gaping for food; some of these rootlets are 3 feet long, and before the vines are out of blossom, many of them are 6 feet in length, and matted round and round the pot. You will easily understand from this how important it is to supply vines so treated with liquid manure, either by watering from above, or by a supply from a saucer or feeder from below.

I am, Sir, yours, &c.

JOHN MEARNS.

Wilbeck Gardens, Jan. 17, 1834.

ART OF MANAGING SHEEP.—Sir: I have been very desirous of ascertaining the particular method in which Mr. Barney, of Philadelphia, manages his sheep, that enables him so far to exceed every body else in producing fine mutton, and good wool.

On his late visit to this city, I put the question to him, wherein consisted his superior management of sheep? He gave the following reply: He said a gentleman visited him not long since, and on going to his sheep-yard, and viewing it, asked him the same question. He showed at that time, from fifty ewes, upwards of sixty lambs, all lively and brisk, with a loss, I think he said, of three or four. The gentleman observed to him that he had his shed covered with dead lambs; and asked wherein the secret in breeding lay. Mr. Barney observed to him, you stuff your sheep with dry food. Yes, as much good clover hay as they will eat, was the reply. Mr. B.—You give them no water, but suffer them to go out in time of snow and eat it as they are disposed to do? Yes. Then, said Mr. Barney, there lies the secret. Your sheep fill themselves with dry hay; they get no water; and they have not a sufficient supply of gastric juice to promote the digestion of the hay in the stomach; they cannot raise it to chew the cud; they lose their appetite; are thrown into a fever; and cannot bring forth their young, or they bring forth a feeble, starved lamb, that falls off and dies the first exposure to the cold or rain. On the contrary, I take care to provide my sheep with good clear water in summer and winter. I feed them regularly with hay through the winter, and give them ruta baga and mangel wurtzel every day. The ewes produce me 120 per cent. increase in lambs. You cannot, says Mr. Barney, get along without ruta baga and mangel wurtzel.

This gentleman has just sold his sheep for upwards of \$17 per head to the butchers. It is his opinion that sheep are the most profitable stock that a man can raise; and it appears he makes use of no expensive food, or increased quantity of it. But the secret of raising good stock of every kind consists in maintaining that regular and cleanly mode of proceeding, which preserves the digestive organs of the an-

imal in a healthy state, and enables them to convert what they eat into chyle, suitable for the nourishment of the animal. Respectfully yours, A.—[Farmer and Gardener.]

DISEASE IN THE FEET OF SHEEP.—As the persons employed on the farm of Anthony Anderson, Esq., at Dorchester Bridge, were shearing his sheep, on Thursday, the shepherd called his attention to a small orifice burst, at the separation of the foot, of one of these animals, and told him that it was a disease called the *worm in the foot*, which Anderson, though an experienced farmer, informs us he had never seen, or indeed heard of. The shepherd advised that the wound should be pared down so as to get at the head, and with a strong needle he passed some doubles of thread through it, and extracted what he called the worm. It appears to be a *Hydatid*, or bladder-like skin, containing a fluid not unlike starch, and a small portion of a hairy substance, resembling the short wool on the legs of sheep. Mr. A. extracted one such worm, from each foot, all similarly placed at the articulation of hoofs; and found five or six of his sheep afflicted in like manner. After extracting the cause of the disease, whatever name be applied to it, he filled the cavity with pepper and salt.—[Quebec paper.]

APPLES FOR LIVE STOCK.—A farmer in Blandford says cows fed with apples in the autumn will give milk as abundantly as in June, and that he cannot perceive any difference in the beneficial effects of sour and sweet apples. Another, in East Granville, says he can make as good pork and beef with apples as potatoes. It is the opinion of many that a bushel of the former nearly equals in value a bushel of the latter. Such facts we think are of great value to the farmer: if he can convert his apples into beef and pork, or by them increase the products of the dairy, then a way is opened for the conversion of fruits into money without going through with the longer and more tedious process of converting them into cider, and that into brandy, and that into money. Again, if pork, beef, butter and cheese, can be made from apples, they will yield a greater profit to the farmer than if he make these articles by the aid of potatoes or grain, since they cost but little.—[Westfield Journal.]

MIXTURE FOR CATTLE AND SHEEP.—It has been recommended, by a gentleman who tried it, to mix salt with unleached wood ashes, in the proportion of one quart of fine salt to one half-bushel of ashes, and place the mixture under cover, where the animals can have access to it. This composition, our informant said, preserves the health of the animals, increases their appetite, and he believed would preserve sheep against the rot, and horses against botts.

From Sir Samuel Moreland's Perpetual Almanac, Ready Reckoner, and Gardener, published in the reign of Queen Anne.]

Directions relating to the Purchasing of Land.

First see the land which thou intend'st to buy,
Within the Seller's Title clear to lie;
And that no Woman to it doth lay claim
By Dowry, Jointure, or some other Name,
That may it cumber. Know if bound or free
The Tenure stand, and, that from each Feoffee
It be released; that the Seller be so old,
That he may lawful sell, thou lawful hold:
Have special care that it not Mortgaged be,
Nor be entailed on Posterity.
Then if it stand in Statute bound or no,
Be well advised what Quit rent out must go,
What Custom service hath been done of old,
By those who formerly the same did hold;
And if a wedded woman put to Sale,
Deal not with her, unless she bring her Male;
Thy bargain being made, and all this done,
Have special care to make thy Charter run.
To these, thy Heirs, Executors, Assigns,
For that beyond thy life securely binds:
These things foreknown and done, you may prevent
Those things Rash Buyers many times repeat,
And yet when you have done all that you can,
If you'll be sure, deal with an honest man.

NEW-YORK AMERICAN.

JUNE 28—JULY 3, 1834.

LITERARY NOTICES.

MIRIAM COFFIN, OR THE WHALE FISHERMEN; 2 vols. New York: G. & C. & H. Carvill.—An original American novel is not so common a publication but that we always take one up with more interest than is created by the reprint of some new fiction from the British book market; and *Miriam Coffin* is a work which, in more respects than one, will repay perusal. It wants many of the requisites of a finished novel, but it contains some most admirable scenes, and abounds in graphic descriptions of manners;—the manners of a race which, though immortalized in the magnificent periods of Burke fifty years since, are still but little known to their own countrymen. We congratulate the Nantucket whalemen upon having at last found an enthusiast to record their daring adventures with a pen that seems guided by the soul of a sailor.

The scene of the story, to be in keeping with the roving characters that move upon it, shifts to every part of the world; and though we have hesitated a little in making our selection between the picturesque islands of the Pacific, and the not unromantic peculiarities of Nantucket itself, we believe that none of our readers who enter into the spirit of the following bold scene upon the coast of Africa, will complain of the preference we have given it over all others in the book. +

Not Ocean's monarch shall escape us free!
Masaniello.

Soon the sport of death the crews repair:
Rodmond, unerring, o'er his head suspends
The barbed steel, and every turn attends;
Ueerring aimed, the missile weapon flew,
And, plunging, strike the fated victim through.
Awhile his heart the fatal javelin thrill'd,
And diluting life escapes in sanguine rills!
Falconer.

Among the indentations of the coast of Western Africa, the bay of Walwich may be traced upon the chart. This bay was much resorted to, in years past, for the right-whale—or the species that live by what whalers call “suction.” The bay contains good anchorage ground, and shelter for ships; and, at some periods of the year, known to whale-fishermen as the season for feeding, the coast along its margin is visited by these huge animals in pursuit of food, which consists principally of peculiar kinds of small fish, that keep in shoal water about the bay and herd or school together in countless numbers. Thousands of the mullet, the roman, the stone-bream, the harder, the mackerel, and many other varieties that abound in African bays, together with myriads of the Medusan race, are sucked in by the right-whale for a breakfast, through the vertical bars of whalebone that stud its mouth, like the gratings of a prison window, or the pailings of a picket fence.

There are but few persons who do not know the difference in the formation and habits of the two principal species of the *cetaceous* tribe—the *mycticetus* and the *cachalot*—which are the object of pursuit of the whale-fisherman. They are called the *right-whale* and the *spermaceti*. The former has immense jaws of bone, without any well-defined teeth, but with a groove of dark fibrous material within its huge mouth, called whalebone, through which to strain its food;—keeping mostly in shallow water, and living upon small-fry; disappearing from the surface at short intervals; remaining under water but for a few minutes; breathing, or ejecting from its blow-holes, columns of water, in two perpendicular streams, or *jets d'eau*, or rising to the surface, and producing inferior oil. The latter, to wit, the *spermaceti*, has tusks of ivory on a huge dropping under-jaw; blunt, clumsy head, and broad tail; frequenting none other than the deepest water; diving deep and perpendicularly; staying long out of sight, and, on rising, blowing or spouting in a single jet, or stream, which inclines to the horizon; and producing a better quality of oil, though in smaller quantity according to its bulk, than the right-whale. The *spermaceti* yields, in addition to its oil, a valuable matter called *sperm*, which is highly prized as an article of commerce; and also produces that rare aromatic drug, called *ambergris*.

Jethro, with his son Isaac, remained in London, intending, when his business should be finished there, to take passage home in some merchantman bound for the colonies.

The *Grampus* set sail from the Thames. The place of her rendezvous with the Leviathan had been appointed at Walwich bay. The *Grampus*, without any remarkable incident, arrived first upon the spot; and had waited for her consort for several days.—Some forty whaling vessels, of all nations, were riding at anchor within the bay, waiting the expected visits from the whales. Day after day—week after week—had glided away, since the arrival of the major part of the fleet, but not a solitary animal had as yet made his appearance. The *Grampus* was fitted out for the sperm-whale fishery, and had taken in her three years' provisions at London. Her captain and crew, who had been some time idle, now longed for sport; and they cared very little,—since wait they must for the good ship Leviathan, in order to double The Horn in company,—whether the invitation to amusement should soon come in the shape of a right-whale, a spermaceti, or a razorback;—the last the most dangerous and least productive of all.

Africa has a burning, sultry coast. The sun was sending a lurid glare upon the sea, which heaved long and sluggishly in the bay, without a breath of air to curl the crest of the swell. The crews of the assembled ships were at their early breakfast, and the officers and men on the lookout were lazily gazing upon the mirrored surface of the water, or listlessly walking to and fro upon their posts. In many of the whale-ships,—particularly in those that had previously been in Northern latitudes,—a crow's nest, or a sort of sentry-box, surrounded, breast high, by canvass stretched as a protection against the weather, and covered with an awning,—was perched on the maintopmast, or at the topgallantmast head. In these places of look-out a man is always stationed to observe the approach of the whale, and to communicate his motions to those on deck. But in the *Grampus*,—destined as she was for temperate latitudes in the Pacific,—no other accommodation was provided for the sentry, than the bare maintopgallant cross-trees, where for hours together the lynx-eyed watcher sent forth his anxious regards upon the ocean, and deemed his station a post of honor,—as it always proved of extra profit, if he should be the first to discover a whale within pursuing distance.

“Dull work! said Seth, slowly pacing the deck;—“work,—by my hopes!—in this accursed climate, where searching airs blow from the great Afric desert:—and as for amusement,—we may feast our eyes, if we like, by looking upon armies of naked Hottentots, ‘capering askore,’ smeared with slush, and surfeiting upon tainted blubber!—who mock us in our commands, as we coast along the bay,—repeating, as they follow us, our very words like an echo—and mimicking our minutest actions, when we attempt to make ourselves understood by signs. Poor brutes!—The Creator has smitten their continent and their minds alike, with barrenness; and has given to the one its arid plains, which defy the hand of cultivation,—while the souls of the people are unblessed with the refreshing dews of intelligence. But what boots it?—they are happier, in their ignorance, than we who boast of knowledge, but who are restless in our desires.

—As the Ocean—

In one unceasing change of ebb and flow.”

The reflections of Seth, upon the blessings of ignorance, were interrupted by a thrilling cry from the mast-head.

“Flocks—flocks!” was the welcome salutation from aloft. The half-eaten meal was broken off,—and the rush to the boats was tumultuous. It was like that of an army of practised gladiators, in the arena of the Coliseum. The alarm was heard by the crews of other vessels; and the intelligence spread like wildfire that a whale was entering the bay.—Four boats were lowered—manned—and put off from the *Grampus*, in less than half a minute after the cry was uttered aloft. A hundred other boats were instantly in motion, and bearing down upon the animal. Some, however, took the precaution to separate from the rest, and this divided the chances of capture. None could count with certainty upon striking the prey, for his course was irregular while in pursuit of his food. The whale is not a vicious animal, unless wounded; and, if not frightened, will move off sluggishly from his pursuers, and appear and disappear at regular intervals:—so that, if the direction is well observed when he sinks, (or shows his *flocks*, or forked tail, as he dives,) a pretty accurate calculation may be made as to the place of his reappearance.

The whalers in the boats that had scattered, had their share of excitement in turn; while those who had headed the whale, when he sunk from their sight for the first time, saw with mortification, by the indication of his *flocks*, that he had already deviated largely from his first course. As a score of

others were already near the spot where he would next rise to blow, the first pursuers naturally lay upon their ears;—but they were watchful of the event of the chase.

Macy, with his two mates, and an approved boat-steerer, had each command of a separate boat. The selection of the crews for these boats, is in fact a matter of taste or favoritism with these officers of the ship. The captain has the first pick of the whole crew;—and, if his judgment is good, he chooses those of the most powerful limb and muscle, quickness of apprehension, and readiness of execution. The next choice falls to the first mate;—the second officer's turn comes next;—and the siftings of the crew fall to the boat-steerers. It may readily be believed that Macy, who was an experienced whaler, was altogether discreet in his choice, and had a crew of oarsmen who might be pitted against any other crew of the whole fleet. To say that they were Americans, and experienced whale-fishermen, is sufficient assurance, of itself, that they were competitors for all whaling honors, against the whole world. It is still, as it was eminently then, altogether un-American to admit of superiority in this business. It was, therefore, with deep chagrin that Macy saw the game escape him; for thus far he had led the van of the attack; while the whalers in some fifty boats in the rear, if not altogether content that he should be their leader, were at least satisfied, that to be beaten by him was no dishonor.

The Englishman, the Dane, the Dutchman, the Swede, as also representatives, of other European nations, were Macy's ambitious competitors, for the honor of killing the first whale of the season:—the long and the strong pull was exerted to carry off the prize, and fair words of encouragement were offered, and enforced in the blandest and most persuasive manner, by those who controlled the boats. Some, uselessly enough, where so many were engaged, pulled after the animal in his devious course after food; while others rested on their oars to watch the result, and to take advantage of his wanderings. The scene was most animating—and but a few minutes served to scatter the boats in every direction; to sprinkle the bay with dark moving spots; to people it with life—sinewy life; in short, it was an exhibition of the noblest of God's creation, both animal and human, waging a war of extermination, and threatening death and destruction by collision.

The noble animal—for it was a right-whale of the largest class—held on its course up the bay, scooping its food from time to time, and annihilating thousands of small fish at a dive; leaving the boats far in the rear, and darting off in new directions, until those who were most on the alert, or rather those who pulled the most constantly, were fain to give up the chase and lie on their oars. The whale approached the anchorage ground of the ships; and its speed was increased as it shoaled the water, in proportion to its eagerness after its flying victims. The small fish, driven before their huge devourer, clubbed together, and concentrated in schools of such magnitude, that the ships were surrounded, as it were, with a dense mass of animal matter, huddling together for common safety, or flying in swarms, before their common enemy, like the multitudinous and periodical flings of the herring from the Greenland seas.

Intent upon his prey, the whale appeared unconscious of the dangerous vicinage of the ships, and played among them with a temerity that evinced a tameness, or perhaps an ignorance of its danger, that plainly showed he had never been chased by the whaler, nor hurt by the harpoon. His eager pursuit after food may, however, account for his recklessness; for, generally speaking, the instinct of the whale is sufficient, upon all occasions, to avoid an unusual object floating upon the water; and at such times the nicest stratagem of the art of the whaler is required to capture him.

The persecuted tribes have been chased so often—pursued so relentlessly, from haunt to haunt, that they must not be unnecessarily scared; for, if they are, the pursuit may as well be abandoned first as last. No crew can row a boat, for any length of time, to keep pace with a frightened and fugitive whale.

The animal, gorged with its fishy meal, at last commenced its retreat from the bay; and the boats manoeuvred to head him off as he retired. Obeying the instinct of his nature, he now showed his *flocks* and vanished from the sight, before the boats could get within striking distance. A calculation being made where he would next appear, (for beneath the water the whale does not deviate from a direct line in his horizontal progress,) a general race ensued; and each strove, as if life were on the issue, to arrive first upon the spot. Some twenty minutes' steady and vi-

gorous pulling found the foremost boats a full mile behind the whale, when he arose again to breathe.—Several boats were unluckily ahead of Seth in the chase, as their position at starting enabled them to take the lead, when the animal began to push for deeper water. But Seth's men had been resting on their oars, while nearly all others had exhausted their strength, in following the whale among the ships; and the captain judged rightly, that in darting after his tiny prey, he would lead them all a bootless dance. He had determined to wait for the retreat, and then to hang upon the rear of the enemy. There were others, however, acquainted with the soundings of the bay, whose tactics were scarce inferior to Seth's; and the advantage gained over him by several boats was proof of this, or at least of the superior accuracy of their calculations. It was a long time since Seth had given chase to an animal of the right-whale breed;—he had grappled, of late, only with the spermaticeti;—and, therefore, it was not to be wondered at, at this time, and under the circumstances, that some of those around him should beat him in manœuvring in the bay. But, in the steady chase, he knew that he could count upon the speed and bottom of his boat's crew, and he was now resolved to contest for the victory.

"We have a clear field now, my boys—give way steadily—we gain upon them—give the long pull—the strong pull—and the pull together:—keep her to it—heave ahead, my hearties!" Such were the words of Seth, as with eyes steadily fixed upon a certain point, and with his steering oar slightly dipping at times, he guided the light whale boat unerringly towards the place where he expected the whale to re-appear. One by one he had dropped his antagonists by the way, until three only remained manfully struggling between him and the prize. The whale again breathed at the surface, and the distance between the headmost boat and the animal was found to be diminished to half a mile—while the ships in the bay were run "hull down." The pursuers were now out upon the broad ocean. Those who had abandoned the chase in despair, were slowly returning to their ships. The rigging of the vessels was manned by anxious spectators, watching the motions of the tiny specks out at sea, with beating hearts. The whale again cast his looks into the air, and sank from the view of his pursuers. Now came the tug of war.

"You must beat those foreigners ahead," said Seth, to his men, "or crack your oars: they are of good American ash, and will bear pulling," continued he:—"Give way with a will!—Pull—pull, my lads;—that whale will not sink again without a harpoon in his body;—and 'twill never do to tell of at home, that we allowed men of other nations to beat us. Keep your eyes steadily on your oars;—mark the stroke of the after oar, men—and give way for the credit of the Grampus!"

Here Seth braced himself in the stern-sheets—seized the steering oar with his left hand, and placed his right foot against the after oar, just below the hand of the oarsman.

"Now pull for your lives!" said he, "while I add the strength of my leg to the oar:—Once more!—Again, my boys!—Once more—There,—we pass the Spaniard!"

"Diabolo!" exclaimed the mortified native of Spain.

The additional momentum of Seth's foot, applied to the stroke oar, had done the job; but two more boats were to be passed,—and quickly too,—or all the labor would be lost.

"At it again, my boys!—steady—my God, give way!—give way for the honor of the Grampus. One pull for old Nantucket!—and—there—we have shown a clean pair of heels to the Dutchman!"

"Hagel!—Donder and blizem!" said the Hollander.

"There is but one boat ahead," said Seth;—"It is the Englishman!—We must beat him too, or we have gained nothing! Away with her, down upon him like men!—One pull for the Grampus, my boys!—another for old Nantucket!"

The American now shot up alongside of the Eng. lish boat:—but the honor of the nation, too, was at stake; and they bent to their oars with fresh vigor. Five athletic Englishmen, each with a bare chest that would have served for the model of a Hercules, with arms of brawn and sinew, swayed their oars with a precision and an earnestness, that, for a minute, left the contest doubtful. The English commander, seeing how effectually Seth managed the stroke oar with his foot, braced himself in a similar attitude of exertion;—and his boat evidently gained upon the Nantucketer! Seth saw the increase of speed of his rival with dismay. The

whale, too, was just rising ahead. The bubbles of his blowing, and of his efforts at rising, were beginning to ascend! It was a moment of intense anxiety. The rushing train, or vortex of water, told that he was near the surface. Both commanders encouraged their men anew by a single word; and then, as if by mutual consent, all was silent, except the long, measured, and vigorous stroke of the oars.

"For old England, my lads!" shouted the one.

"Remember old Nantucket, my boys!" was the war-cry of the other.

Both plied their oars with apparently equal skill; but the hot Englishman lost his temper as the boat of Seth shot up again, head and head with him—and he surged his foot so heavily upon the after oar, that it broke off short in the rowlock! The blade of the broken oar became entangled with the others on the same side, while the after oarsman lost his balance, and fell backward upon his leader.

"I bid thee good bye!" said Seth, as he shot ahead.

"Hell and damnation!" vociferated the Englishman.

"Way enough—peak your oars!" said Seth to his men. The oars bristled apeak, after the fashion of the whale-fishermen. The harpooner immediately seized and balanced his weapon over his head, and planted himself firmly in the bow of the boat. At that instant the huge body of the whale rose above the surface; and Seth, with a single turn of his steering oar, brought the bow dead upon the monster, a few feet back of the fin. Simultaneously with the striking of the boat, the well-poised harpoon was launched deep into the flesh of the animal.

"Starn all!" shouted Seth.

The boat was backed off in an instant; and the whale, feeling the sting of the barb, darted off like the wind! The well-coiled line flew through the groove of the bow-post with incomparable swiftness, and it presently began to smoke and then to blaze with the rapidity of the friction. Seth now took the bow with his lance, exchanging places with the harpooner, and quietly poured water upon the smoking groove, until it was cooled. The oars were again peaked, and the handles inserted in brackets fixed on the ceiling of the boat beneath the thwarts—the blades projecting over the water like wings; and the men, immovable, rested from their long, but successful pull:—and much need did they have of the relief,—for a more arduous, or a better contested chase, they had never experienced.

The line in the tub was now well nigh run out; and the boat-steerer, with a thick buckskin mitten, or *nipper*, as it is called, for the protection of his hand, seized hold of the line, and, in a twinkling, caught a turn around the loggerhead, to enable the man at the tub oar to bend on another line.

The rapidity of the animal's flight the while was inconceivable. The boat now ploughed deeply and laboriously, leaving banks of water on each side, as she parted the wave, that overtopped the men's heads, and effectually obscured the sight of every object on the surface. The swell of the closing water came after them in a heavy and angry rush. The second line was now allowed to run slowly from the loggerhead; and a *drag*, or plank about eighteen inches square, with a line proceeding from each corner, and meeting at a point like a pyramid, was fastened to it, and thrown over to deaden the speed of the whale. Another and another drag were added, until the animal, feeling the strong backward pull, began to relax his efforts:—and presently he suddenly descended, though not to the full extent of the slackened line.

It now became necessary to haul in the slack of the line, and to coil it away in the tub carefully; while the men pulled with their oars, to come up with the whale when he should rise to the surface. All things were soon ready again for the deadly attack.

The ripple of the whale, as he ascended, was carefully marked; and when he again saw the light of day, a deep wound, close to the-barbed harpoon, was instantly inflicted by the hand of Seth. It was the death blow.

"Starn all!" was the cry once more—and the boat was again quickly backed off by the oarsmen.

The infuriated animal roared in agony, and lashed the ocean into foam. The blood gushed from his spout-holes, falling in torrents upon the men in the boat, and coloring the sea. The whale, in his last agony, is a fearful creature. He rose perpendicularly in the water, head downwards, and again writhed and lashed the sea with such force, that the people in the retreating boats, though ten miles distant, heard the thunder of the sound distinctly. The exertion was too violent to last long:—it was the

signal of his dissolution. His life-blood ceased to flow, and he turned his belly to the sun! The *waif* of the Grampus floated triumphantly above the body of the slaughtered Leviathan of the deep—and the peril of the hardy crew was over.

TALES AND SKETCHES, SUCH AS THEY ARE, by Wm. L. Stone, 2 vols.—Unwonted neglect on our part, and an accidental misplacing of these sprightly and agreeable volumes, have delayed this notice, which should have been given some weeks ago. We mention them now with unavoidable brevity—our columns being crowded with matter previously prepared—because we are unwilling to continue the delay. In the deluge of multifarious publications through which we wade every week, we are happy now and then to find a work strictly American,—though it is seldom that we have to notice two publications on the same day to which that characteristic applies. It is certainly no mean recommendation of "Tales and Sketches." They come before the world unpretendingly, and from a writer who, in a different capacity, has long entertained and effectually served the public. We are glad to see that he can occasionally depart from the drudgery of a daily paper to luxuriate in the regions of fancy, and, while doing so, can weave into his fiction so much that is valuable and interesting of historical fact.

A BRIEF VIEW OF THE CONSTITUTION OF THE UNITED STATES, by Peter S. Duponceau, LL. D.; Philadelphia.—This work by the venerable provost of the Law Academy of Philadelphia, should be perused by every one who would familiarize himself with the opinions of one of the most celebrated lawyers in our country upon the most important instrument in its archives. The volume is for sale by Mr. Wiley, Nassau street, and also at Carvill's.

JOHN MARSTON HALL, by the author of *Richelieu*; 2 vols., Harpers.—The mantle of Sir Walter, like that of Shakespeare, will hardly within the same century, if ever, descend upon another. But among all the competitors for the wand of the great magician, Mr. James certainly deserves the palm for success, in the heroic romance. He treads more gracefully, and with more vivacity, in the steps of his great master than any of his pupils; though the measure in contrast is still but the walk of a minuet to the march of a giant. The present production will be read with pleasure by his admirers as reviving agreeable associations with a former favorite,—the hero being "Little Ball O'Fire," the spirited urchin that figures in so many scenes in the life of "Henry Masterton." The scene of the story is laid at the French Court in the reign of Louis the 14th, and the details are managed with all that minute knowledge and keeping of costume in which Mr. James is second only to the great Scottish antiquarian.

THE COMPLETE WORKS OF SIR WALTER SCOTT, with a Biography, &c. &c., Vol. VI. New York—Conner & Cooke.—In calling the attention of our readers again to this cheap publication, we could only repeat the terms of approval applied to the previous volumes, the present one being, in every respect, equal to the others. It contains, with Tales of A Grand Father, the Lives of the Novelists and his Notice of Byron, &c.

LECTURES ON PHRENOLOGY, DELIVERED BEFORE THE YOUNG MEN'S ASSOCIATION FOR MENTAL INSTRUCTION, IN THE CITY OF ALBANY; by Amos Dean.—We had marked a long extract from this work, for quotation, as the best mode of showing its claims upon the general reader. It shall be given hereafter; and, in the meantime, we can only observe, that those who would be readily initiated into the new science that is so rapidly gaining ground in the teeth of all ridicule and opposition, are much indebted to Mr. Dean for his neat and comprehensive essay.

THE REPUBLIC OF LETTERS, No 3.—We have intended as each successive number appeared, to no-

tic this judicious publication. To those who are not apprized of the plan upon which it is conducted, it is merely necessary to observe, that it is a weekly issue of a beautifully printed quarto sheet at six cents a number, each number containing one or more octavo volumes. When it is added that "The Man of Feeling" and "The Vicar of Wakefield," two of the finest classics in our language, may thus be had for the sum of 12 1.2 cents, it will be seen, that both from the true taste and the liberality with which it is conducted, there can be no publication which promises better to diffuse abroad a knowledge of the models of polite literature than the Republic of Letters. The last number published contains "The Tales of the Hall," by Crabbe, one of the most vigorous of modern writers. His style, indeed, though strikingly original, is often overdone; and his subjects are of so coarse a character as frequently to leave a harsh and unpleasant impression upon the reader; but there is ever a truth to nature in her humblest guises, which renders his minute delineations and skillful dissections of character invaluable.

North American Review.—The eighty-fourth number of this journal will appear on the first of July. The contents are as follows:—1. Life of Schiller.—2. The Philosophy of History.—3. Roman Literature.—4. Usury and the Usury Laws.—5. The Free Cities of Flanders.—6. Life and Writings of Crabbe.—7. Helen.—8. Miss Peabody's Key to History.—9. Origin and Character of the Old Parties.

[From the *Journal of Commerce*.]

FURTHER FROM LIBERIA.—In yesterday's paper we announced the death of Rev. Matthew Laird and wife missionaries of the Western Foreign Missionary Society, who arrived in the Colony on the 31st December. We have now the painful duty to add the death of Rev. John Cloud, missionary of the same society, and Rev. S. O. Wright, of the Methodist Missionary Society. The wife of the last named gentleman died in February last. Her death has been before announced. *Among the emigrants by the Jupiter*, which arrived at the Colony on the 31st December, *there had been no deaths except a woman of seventy-five years, and two children under twelve*. Mr. and Mrs. Spaulding, Methodist Missionaries, were to leave Liberia on the 12th of May, in the ship Argus for Boston. Their object is, to procure a reinforcement and recruit their health. They are soon to return to the Colony, as is also Mr. Temple, a colored Assistant missionary, who has arrived in the schr. Edgar at this port. Mr. Jones, who has also arrived in the Edgar, is about to proceed to Kentucky for his family. The general health of the Colony is good. We have had the pleasure of an interview with Messrs. Temple and Jones, and are happy to state that they are in excellent spirits in regard to the Colony, and think it the best place for the colored man which the world affords. Mr. Temple has not fully recovered from the effects of the fever. Annexed is a letter from Rev. Mr. Pinney, Colonial Agent, to R. S. Finley, Esq.

Monrovia, May 10, 1834.—Mr. Temple, the last of the band of Presbyterian missionaries who landed in Africa the first of January last to try its perils, will hand you this note, and communicate more at length the tidings my pen is loth to speak.

Mr. T. will, I trust, do good while at home. He is desirous of ordination and expects to return very soon. The vessel sails in about two hours, and time is short. Our losses do not dishearten me. I trust the church will not be discouraged. God is about to try us, but I hope some good will be found, and faith which shall not tremble though a thousand fall.

From Liberia papers received at this office.

Monrovia, Jan. 29.—Native Coffee Trees.—Professor Wright, in the Colonization debate between him and Mr. Finley, was positive that coffee trees were not indigenous to this part of the coast, but came from an African Island. If the Professor would take the trouble to pay us a visit, we would show him a dozen varieties of the coffee plant, in our immediate vicinity, growing spontaneously in our woods.

Grand Bassa Settlement.—Recent accounts from Edina, represent this settlement in a most flourishing condition, and so industrious had the settlers been, that 15 shingled houses had already been erected.

The recent purchase of the Devil's Bush, had given

great satisfaction to all parties, and but little time would elapse, when that spot, so long consecrated to the unhallowed rites of Moloch, would be covered with Christian inhabitants.

Monrovia, Feb. 25.—Houses for New Emigrants. Two extensive buildings (one of which is nearly completed) are now erecting in a pleasant part of our town for the reception of new comers.

Erection of a Light House on Cape Messurado.—It is proposed to erect a Light House on Cape Messurado, for the benefit of our infant commerce. The want has long been felt, and several ship-masters have wondered that a small tax had not been levied before now, to defray the expenses of the same.

Erection of a Sawmill.—Measures are in train for the erection of a Sawmill on the creek nearly opposite Millsburgh, on the St. Paul's River. It is a pity that we have not one or two steam mills in operation for sawing lumber, as the natives have lately adopted the commendable plan of rafting down logs suitable for sawing, to our water's edge; and now they have adopted the plan themselves, there will be no difficulty in keeping them so employed, if suitable encouragement is held out.

Price of Rice and Coffee in the Settlement.—From a perusal of a late number of the *Genius of Universal Emancipation*, which has been politely furnished us by the Editor, a person would be led to believe that our Colonists really paid at the rate of 25 cents per pound for rice, and 70 cents for coffee. This is something new to us and our readers, to hear that African rice has been sold by the pound in our market.

We assert without fear of contradiction, that we have never known rice, (in times of greatest scarcity, which is during the rains, before the new rice is fit for cutting,) to sell for more than two dollars and fifty cents per bushel. To arrive at a fair rate, at which rice should be quoted, will be, to put it down at one dollar and sixty cents the bushel; as during the season when all prudent persons should lay in their rice, it can be purchased for one dollar per bushel, and often for less. Estimating a bushel at sixty-eight pounds, it would then give nearly two one-half cents per pound, instead of twenty-five. A wide difference. Coffee grows wild around us, and if a little encouragement was held out to the natives, might be purchased at a moderate rate, at least enough for home consumption.

Our Colonists have not paid much attention to the culture of this important berry, but we know one family, who have for years raised more than enough for their own consumption from trees of their own planting. We have never seen sixty cents per pound paid for coffee yet, and we are doubtful if it has ever been.

LATEST FROM EUROPE.—By the ship New York, Captain Hoxie, which arrived last night from Liverpool, from which port she sailed on the 26th May we have received London papers to the 25th inclusive. The Manchester, Capt. Swift, had already put us in possession of Paris dates of the 24th; and by the France, which arrived to-day, our files are completed up to that time. The French papers are devoted to the obsequies of Lafayette, with which the Parisians seem to be wholly engrossed.

In London, the critical political topic of Church Reform was not less absorbing. "It again," says a London paper, "formed the prominent subject of discussion in the House of Lords last night. The Tory Temporal Peers and some of the Right Reverend Prelates, amused themselves with vehement discourses on the mode in which the Lord Chancellor brought in the Bills for the suppression of Pluralities and Non-Residence; that is to say, for moving their first reading without a more formal notice to their Lordships. We think that the Peers would better consult their public reputation if they would interest themselves more liberally in the subject matter of Church abuses and their remedies."

It is mentioned in one of the French papers, that M. Lafitte entertained the project of proposing to the Chamber of Deputies that the body of General LAFAYETTE should be deposited in the Pantheon, but renounced it on learning that it was the decided wish of the family that the directions of the deceased as to his interment should be scrupulously followed.

All the ministerial papers contain eulogies on this

consistent and persevering friend of human liberty. The military honors paid to him were those which belong to a General in Chief. The account of the funeral will be found below.

The following is a translation of the letter addressed by the President of the Chamber to his Son, in reply to one from him announcing his father's death.

Sir, and Dear Colleague.—The Chamber has learned, with deep sorrow, the loss she has just sustained. The death of General LAFAYETTE deprives the Chamber of one of its most illustrious members—of a great citizen, whom liberty has ever found faithful to her cause, in every period when she needed a defender. The revolution of July found him again at the head of that brave National Guard of Paris, whose patriotism and devotion have never failed to comport with the device of "Liberty, public order," inscribed on their banners.

The name of General LAFAYETTE will ever remain celebrated in our annals. He will appear there amongst the principal founders of the Constitutional monarchy, which he with us, cheered onward in its course, and which had his best wishes. Accept, &c.

Signed, DUPIN.

FRANCE.—"The Parisian papers (says a London paper,) continue to be much taken up with remarks upon the character of Lafayette, to whose memory, with the exception of the Carlist party, they do the justice which we have ourselves already rendered to him, of being a most respectable private character, an ardent patriot, but not very profound politician."

The funeral took place on Wednesday, and from the public character of the deceased, both as a member of the Chamber of Deputies and a General, was invested by the Government with all the imposing pomp which the attendance of numerous bodies of military never fail to give to processions of this description, and of the National Guards, who came forward in immense numbers, to join in giving effect to this parting act of homage to their venerable colleague.

Funeral of Lafayette.

From an early hour on the morning of the 22d of May, the Rue d'Anjou St. Honore, in which the hotel of the late lamented Lafayette is situated, and every street and passage in its vicinity, was crowded with citizens of Paris, hastening to pay their last tribute of respect and attachment to the illustrious deceased.

The funeral ceremony (says Galignani's Messenger, from the public character of the deceased, both as a member of the Chamber of Deputies and a General, was invested by the Government with all the imposing pomp which the attendance of numerous bodies of military never fails to give to processions of this description; while the attendance of the National Guards, who came forward in immense numbers, to join in giving effect to this parting act of homage to their venerable colleague, and the crowded state of the streets leading to the Church of the Assumption, where the funeral ceremony was to be performed, and from thence along the Rue de la Paix, the entire length of the Boulevard, and every spot near which the procession was to pass, showed the extent of the popularity, and the affectionate esteem with which the deceased was regarded by every class.

About half past seven the members of the various deputations appointed to take part in the procession began to arrive at the hotel, which was handsomely hung with black. Among these were numbers of staff officers, of the troops, and the national guards. Detachments of infantry were placed as guards of honor in the commencement of the Rue de Faubourg St. Honore, the Rue Royale, the Rue St. Florentin, and other points by which the procession was to pass.

At a few minutes after nine the body was brought down and deposited in the hearse, which was decorated with twelve tri-colored flags, three at each corner; it was surmounted by plumes, and had the letter L on various parts of the drapery, and was drawn by four black horses. The cordon of the hearse were held by four persons of distinction, friends of the deceased. After a few minutes spent in preliminary arrangements, the funeral march struck up, and the cortege began to move. The hearse was preceded by muffled drums, deputations from various legions of the National Guards of Paris, and the Banlieue, the 61st Regiment of the Line, and a regiment of Red Lancers. The hearse followed, which was immediately succeeded by the Deputations of the Chambers of Peers and Deputies; other deputations followed, from various public bodies, among whom we perceived numbers of foreign

ers, particularly Americans and Poles. These were succeeded by *Chefs de Bataillon* of the National Guards and the Line, and these again followed by other detachments of National Guards and troops of the Line, headed by muffled drums and full military band; two pieces of cannon, and detachment of the 1st regiment of Artillery, with a numerous body of cavalry of the National Guards. Four of the Royal carriages, three private ones of the General, followed by another regiment of the Lancers, several private carriages, and a body of Municipal Guards, wound up the procession.

The immense crowds, and the small space left for the military, occasioned considerable confusion previous to arriving at the church, for want of room the hearse being stopped on one occasion more than a quarter of an hour. The coffin was then taken into the church, and the funeral ceremony being performed, the procession again proceeded; and, notwithstanding the incalculable crowds assembled, has passed the Rue de la Paix, and is now (as we are going to press) far advanced on the Boulevard, with the most perfect order and regularity.

All the Ministers (says the same *Gazette*) on leaving the Council held by the King on the preceding day at the Tuilleries, went in a body to make a visit of condolence to the family of Gen. Lafayette. They were received by M. George Lafayette, and were conducted by him to view the body. An immense number of persons of all classes called in the course of the day, and inscribed their names as participants in the general grief.

At a meeting of the citizens of the United States in Paris, held on the 21st at the Hotel of the American Legation, to take into consideration the most appropriate manner of expressing their sorrow for the loss they and their country have sustained by the death of the great and good Lafayette.—Thomas B. Barton, Esq. Chargé d'Affaires of the United States, was called to the chair, and Dunscomb Bradford, Esq. American Consul, was appointed Secretary.

The following resolutions were offered and unanimously adopted:

Resolved, That we have heard of the death of our illustrious fellow citizen, the virtuous Lafayette, with feelings of the deepest sorrow and regret—

Resolved, That the citizens of the United States, now in Paris, will attend in a body, the funeral of Lafayette, in testimony of the high respect they entertain for his exalted character, as the undeviating friend and defender of the liberties of their country, and of those of the human race.

Resolved, That a committee be appointed to address a letter of condolence to the family of Gen. Lafayette, expressive of their deep sympathy in the affliction dispensation with which it has pleased Divine Providence to visit them.

Resolved, That as a further testimony of their high admiration for the virtues and perfect consistency of character of Lafayette, through a long life, and under the most arduous circumstances, they will wear crape upon the left arm for three months.

On the motion of Mr. Brooks, seconded by Mr. Adams, it was then

Resolved—that a copy of the foregoing resolutions be communicated by the Secretary of this meeting to the family of the illustrious deceased, and that the proceedings of the meeting be published.

On the motion of Mr. French, seconded by Mr. Blow, it was

Resolved, That the United States, as far as they are represented at this meeting, each furnish a member to constitute the committee to address the letter of condolence to the family of General Lafayette: whereupon, the following gentlemen, representing seventeen States of the Union, were, on the motion of Mr. Hayne, seconded by Alex. Claxton, Esq. U. S. Navy, named that committee:—

Dr. Wood, of Maine.

N. Niles, Esq. of Vermont.

Charles Brooks, Esq. of Massachusetts.

J. Dennison, Esq. of Connecticut.

Mr. Burns, and Mr. Brevoort, of New York.

Philip Kearney, Esq. of New Jersey.

Dr. A. B. Tucker, of Pennsylvania.

Alexander Claxton, Esq. U. S. N. of Maryland.

Rev. F. S. Mines, of Virginia.

Arthur P. Hayne, Esq. of South Carolina.

Dr. L. A. Dugas, of Georgia.

W. P. D'Arusmont, Esq. of Indiana.]

Dr. A. P. Elston, of Kentucky.

J. S. Pomer, Esq. of Mississippi, and

D. Urquhart, Esq. of Louisiana.

On the motion of Mr. Townsend, Mr. Barton and Mr. Bradford were *ex officio* placed on the Committee. After a short adjournment, the Chairman, in the name of the Committee, reported a letter of condon-

gence to the family of General Lafayette, which was unanimously adopted. On motion of Mr. Hayne, seconded by Mr. Brooks, it was resolved, that an eulogy on the illustrious character of the revered Lafayette be delivered before the American citizens at Paris. On the motion of Mr. Brewster, seconded by Mr. Niles, it was also resolved, that five gentlemen be named by the Chair, to constitute Committee of Arrangements, to provide for the execution of the preceding resolution; whereupon, Mr. Brewster, Mr. Niles, Mr. Atherton, Mr. Brevoort, and Mr. Brooks, were named that Committee. It was then resolved, that the proceedings of this meeting be communicated by its Secretary to the Legation of the United States at Paris, with the request that they may be recorded on the books thereof—and the meeting adjourned.

Doc CHEAP.—It is stated that during the year 1833, there were no fewer than 30,000 Crosses of the Legion of Honor conferred by the French Government, and that up to the 1st of May, in the present year, the number granted had exceeded 18,000. This approaches, in the distribution of honors, very nearly to the principle of universal suffrage.

The Chamber of Deputies had voted the budget of receipts, and has thus closed its labors. It will probably not again be convoked, except to hear the word dissolution. All France appears tranquil at present.

The Marques de Fitzjames, who was sentenced by the Court of Assizes for the Somme, to imprisonment for three months, for chalking on the wall at a public inn, the words "Vive Henri V." has surrendered himself at the prison at Amiens, to undergo his penalty.

A splendid sword has been subscribed for, and presented to Marshal Gerard, in commemoration of the capture of Antwerp.

In 1833 the number of Volunteers who enrolled themselves in the army, amounted to 5591.

SPAIN.—[The Cortes are convoked to assemble on the 24th July. The Carlists still continue to struggle against the Government of the Queen; and one of their chiefs, General Zumalacaraguy is accused of acting with the greatest ferocity. Colonel O'Donnell, the son of the Count D'Abisbal, having fallen into his hands, the following is given as the dialogue which occurred between him and Carlist General's Aid-de-Camp, before his execution.]

"Aid-de-camp: My general desires me to offer you not only quarter, but your continuation of your present rank, with a certain command, if you will swear fidelity to the King, Don Carlos V."

"O'Donnell: I cannot be a traitor to my honor. I have sworn fidelity to the Queen, as well as to the nation, represented by its Cortes. I have no other sovereign than those."

"Aid-de-camp: Reflect well on what you say, colonel—the death of an officer like yourself will be painful."

"O'Donnell: To die for my country, is to die for immortality."

"Aid-de-camp: And what shall I say to my general?"

"O'Donnell: That I will give a certain sum of money for my release, but that if my release is to be effected at the cost of a perjured oath, I would rather die a thousand times than take it."

"In consequence of this obstinacy, O'Donnell was ordered to be shot. He marched with calmness and serenity to the ground, exhorting the soldiers who were to suffer death with him to bear their fate like men, and exclaimed at the moment that the word 'fire' was given—"We die in defence of the Queen and the rights of the nation."

MADRID, MAY 14.—I have received the Gazette in time for the Courier. It contains, as you will see, an order from Martinez de la Rosa to the Captain-General of Castile, instructing the Sub delegate of Fomento and the Corregidor of Madrid to prepare suitable chambers for the meeting of the Courts of both one and the other Estamentos, which is to take place on the 24th July next. The order is dated Aranjuez, May 12.

The same Gazette contains a Royal order appointing Jose Martinez de San Martin to the post of Superintendent General of the Police of the Kingdom, as well as some orders for changes in the municipality of Jerez, near Cadiz, in consequence of a Carlist disturbance which took place there on the 7th inst.

The Four per cents yesterday were at 55 1-2.

M. Martinez, merchant of Cadiz, has offered to equip 100 Urbanos at his own expense.

The Royal Council of Spain and India will be installed on the 15th inst.

Intelligence has been received this morning of the capture of and declaration of Coimbra, on the 8th, in

favor of Donna Maria, and of the junction of Rodil and the Duke of Terceira. This news has raised the Funds one per cent, and the Fours are now at 57.

A conspiracy was discovered here last night, the particulars of which have not transpired. It is not a very serious matter.

PORTUGAL.—[The news from Lisbon is to the effect that Figueras and Coimbra have surrendered to the Pedroites. Both are said to have fallen without a blow being struck. Figueras was taken possession of by Admiral Napier, and Coimbra by the Spanish and Portuguese forces: the former under the command of General Rodil, and the latter under that of the Duke of Terceira. The Miguelites are still strong in the province of Beira, and their superiority in the southern part of the kingdom undisputed.]

Doubts continue to be expressed, in consequence of the non-arrival of the ratification of the Treaty from Lisbon, that Don Pedro hesitates to attach his signature to the State Document; but we are informed, upon what we consider ample authority, that the Treaty has been signed, and it will be conveyed to this country by the Government steamer, the Countess of Pembroke, which was especially appointed to carry out the Treaty and to bring back the document ratified.

GERMANY.—The Augsburgh Gazette of the 18th of May, has the following, of the 11th, from Vienna:—"The Spring Festival will be celebrated tomorrow by a *déjeuner dansant* in the Imperial Gardens; all the Diplomatists are invited. Most of the German Ministers have requested audiences of leave, which indicates that the Congress is about to close. The Emperor will quit the capital for Schenbrunn on the 13th."

SWITZERLAND.—The *National Genevois*, in a postscript of the 9th of May, says—"A traveller from Rumeltz tells us a corps of troops, stated at 50,000 men, is expected in Savoy; it was even said that preparations were made to receive them." Fifty thousand Piedmontese! a large number. The Journal adds:—"Several pieces of cannon are mounted on their carriages, in order that our ramparts may be properly armed in case of need."

ENGLAND.—London, May 24. In the House of Lords, yesterday, several petitions were presented for the protection of the Established Church, and against the claims of the Dissenters. Some petitions were also presented, praying for the separation of Church and State, and in favor of the Dissenters claims.

The Earl of Harrowby, on presenting petitions for the protection of the Church, admitted that the real grievances of the Dissenters ought, as far as was practicable, to be redressed. But he called upon their Lordships to take care that they did not place that body in the vantage ground, by which they might be enabled to continue the attack that they had avowedly made against the Established Church. He trusted that their Lordships would agree with him, and not give their assent to any thing that would endanger the safety of that fabric.

We hear that it is finally determined that all foreign papers shall be admitted into England by payment of three-halfpence per paper, and that the same postage will be exacted for all English papers forwarded to the Continent. It is asserted, but we cannot believe it, that none but newsmen registered for the purpose, will be allowed to receive papers from the Continent.—[Morning Chronicle.]

BELGIUM.—A letter from Frankfort, dated May 2d, says—

"The difficulties in which the question of the cession of part of Luxembourg to Belgium are involved do not appear likely to be soon surmounted. The Dutch Envoy often finds it necessary to ask for new instructions from his Court, and no progress is made. As for the Austrian Envoy, Baron Von Neumann, his time seems almost entirely occupied in journeys from Biberich to Frankfort, and from Frankfort to Biberich. He too appears to be very much in want of instructions."

The Prince of Orange has returned to the Hague from the army.

The New Orleans Bulletin of the 12th has the following:—

Brig General Santa Anna, Vanstaveren, five days from Tampico, reports that a new revolution had broken out in Mexico, that the troops of Orizaba and Cordova had declared for a military government, and to maintain the Catholic religion in all its apostolic forms and rules; that the troops of Puebla had declared for religion in the same tone, but to sustain the Federal government; that there had been some blood shed in Puebla; that the Northern States of

Zacatecas and San Louis Potosi, had determined to sustain the forms in religion and the present government.

SUMMARY.

APPOINTMENTS BY THE PRESIDENT.
By and with the advice and consent of the Senate.
John Forsyth, Secretary of State, in the place of Louis McLane, resigned.

Levi Woodbury, Secretary of the Treasury, in the place of Roger B. Taney, rejected.

William S. Holabird, to be Attorney for the District of Connecticut.

Thomas Turner and Fleet Smith, to be Justices of the Peace for the County of Washington, in the District of Columbia.

Charles Scott to be a Justice of the Peace for the County of Alexandria, in said District.

PENSACOLA, June 14.—*Naval.*—The U. S. sloop of War *Vandalia*, left here, somewhat unexpectedly, on Tuesday last, in search, we understand, of the schooner *Experiment*. Since the *Experiment* left Havana, nothing has been heard of her. Fearing that some accident may have happened to her, the commanding officer of the squadron has promptly despatched the *Vandalia* in quest of her. We learn that the *Experiment* left this port with only five weeks' provisions of board, and she has been absent upwards of seven weeks.

The suggestion contained in the following paragraph, should not be forgotten:

Some time ago, the British Government sent to that of France a complete set of its Parliamentary papers, consisting of about 600 volumes folio—the result was a similar present from the Government to ours.

A present of a somewhat similar character has been sent to the principal Libraries of the United States. This is well, as it will no doubt lead to a reciprocal exchange on future occasions. We know from experience that American constitutional documents are almost impossible to be found in London. Having had occasion a few years since, to refer to some works which are to be met with in every considerable Library in America, we searched some of the public Libraries in London, but in vain. We have often heard this complaint from others.—[Montreal Advertiser.]

Cholera at Cincinnati.—The Cincinnati Intelligencer of the 23d ult. says: "We hear of repeated cases of cholera in this city, some of which have proved fatal. Many complain of the premonitory symptoms."

Among the deaths at Louisville, of cholera, are those of John F. Anderson, of the firm of Thomas Anderson & Co.; Mrs. Margaret Grey, a native of Philadelphia, and wife of Mr. Jackson Grey, of the New Orleans theatrical company. It has been made certain, that those persons who were supposed to have been poisoned by partaking of food prepared for a wedding party, were cases of cholera.

The Louisville Journal says:—"The Cincinnati Republican has been misinformed in several particulars concerning the recent deaths in this place. The custard was not served to the company at the wedding, but sent to the houses of the guests next day. It was a day or two before any were attacked; the number was not more than twelve or fifteen, of whom about eleven have died. There is great doubt whether any poison has been employed; none has been detected with certainty, in the examinations which have taken place. The Faculty of Louisville have had a meeting on the subject, and are about equally divided in opinion whether poison was or was not used."

The Atlantic Insurance Company have declared a dividend of ten per cent, for the last six months, payable on Monday next.

[From the *Journal of Commerce*.]

NEW BANKS.—We learn by a gentleman from Poughkeepsie, that the books for the capital stock of the Farmers and Manufacturers Bank in that village, were closed on Friday last—\$1,650,400 having been subscribed. Capital stock \$300,000. The stock of eight banks chartered or increased by the Legislature at the last session, has been offered, with the following results.

Names.	Where.	New Capital.	Subscribed.
Phenix Bank	New York	\$1,000,00	\$3,146,925
Lafayette Bank	do	500,000	1,849,000
Commercial Bank	do	500,000	1,296,150
Albany City Bank	Albany	500,000	1,142,900
Farmers' & Manuf's Po'keepsie	do	305,000	1,650,400
Highland Bank	Newburgh	200,000	951,400
Orleans Co. Bank	Albion	200,000	680,200
Sackets Harbor B'k Skt's Harbor	do	200,000	about 600,000
		\$3,400,000	\$11,316,975

The Rev. Wm. M. Carmichael has resigned the Rectorship of Christ Church, Rye, Westchester Co., and accepted that of St. James', Hyde Park, Dutchess county.—[Churchman.]

The schr. *Sabina*, at New Orleans, reports the wreck of the schr. *New Packet*, Capt. Ramsell, which took place on the 20th May, at the bar of Aransas. She is a total wreck. We learn (says the New Orleans Bulletin of the 18th) by the mate, that 82 of the Irish emigrants which went out in the N. P., died of the cholera before they reached Aransas, together with three of the crew.

We find in the Boston Liberator, Mr. Garrison's paper, the following notice, the Editor vouches for the character of the advertiser, and certifies that he is serious in his proposals, and it is actuated by disinterested and general motives:

A Friend of Equal right, is convinced that our colored brethren and sisters are entitled to all the rights and privileges which are claimed by the whites; that prejudice against color is extremely absurd; and that as long as this prejudice exists, its victims will feel the yoke of oppression crushing them to the earth. He takes the liberty also to state, (being himself what is termed a white man,) should he meet with suitable opportunity, he is convinced that it would be his duty, and it is his determination to bear testimony against this prejudice by marrying a Colored Woman.

Information would be thankfully received of any young respectable, and intelligent colored Woman, (entirely or chiefly of African descent,) who would be willing to endure the insults and reproaches that would be heaped upon her for being the partner of a white man; and who is either in low circumstances, or would be willing to cede all she has or may have of this world's goods, to the American Anti-Slavery Society, that the mouths of gainsayers may be stopped. Information sent by letter (post paid) to E. K. Chester, Penn. will meet with due attention.

Locusts.—The Flatbush woods are swarming with locusts, which the warm weather seems to have emancipated from their chrysalis. They are rather smaller than the ordinary green locusts, with black bodies, red eyes, and yellow legs and wings.—[L. I. Star.]

[FOR THE NEW YORK AMERICAN.]

Translated from the French.

Can Love exist without Jealousy?

I cannot persuade myself that the stoics, who had held the first rank among the ancient philosophers, could by their discipline procure their followers an exemption from every kind of passion. They knew very well that the passions were so natural to them, that it would be impossible to destroy in man what was so deeply engrained in his constitution. Sene-
ca, who was the master of that sect, freely confessed that the wise man cannot prevent emotions from rising in his soul, but that reason can prevent their swelling into excess. We are a compound of the spiritual and the material: our spirits assimilate us to the angels, and our bodies partake of the animal nature. On the one hand, Moses informs us that the angels have been envious and presumptuous, and on the other, we see every day that animals give scope to unrestrained passions. We know that maladies are as natural to man as his passions, and that no one has ever attained exemption from them. The body is composed of parts so different in temperament, and we are exposed to so many accidents, that it is impossible for us to escape all bodily discomfort. Some maladies are severe, and others slight; some men who have a good temperament are never troubled with any but slight disorders, which soon pass away. It is the same with the passions of the heart; and wise men, who admit they are not exempt from them, tell us they have none but slight emotions, and that while in some the passions are so powerful as to be dominant, in others, their hold is not so strong but that they may be controlled by salutary remedies.

Since, then, the passions are natural to man, jealousy, which is one of the strongest, and is compared by the Scripture to death and hell, jealousy, the offspring of love, we are constrained to believe, will never give absolute quarter to any who love. We will expatiate a little in proof of this.

There is no need of our entering here into a description of love. The reader will find many books which unfold its nature; it is sufficient here to speak of jealousy, which is its offspring. We have said elsewhere that beauty in a person of a different sex has fascinations so great that it enchains us, even against our will, and whatever resistance we make is insufficient to defend us against its at-

tack. Such are its attractions that it gets within our hearts and acquires the mastery of our inclinations. When love is ardent, it keeps the image of the loved object present to our thoughts, though the object be absent, and the individual takes pleasure in discoursing of the loved one. A mind that is in this state, is not capable of accurate discrimination, it receives incorrect ideas mingled with the true; delusions slip in and impose themselves upon it, and it is led to distrust, by the suspicions and conjectures it fabricates. Perhaps a man fears that he has not sufficient agreeable qualities to retain the favor of the loved individual, and thence entertains fears that she is inconstant, and that she has ceased to love him. The weakness of our nature and the delusions of love then transmute these conjectures into proofs, and these doubts into convictions, notwithstanding the assurances we may receive from the individual. Indeed, we can hardly love ardently without jealousy; for after having attained that high degree of passion in which the changeableness of our nature renders it impossible for us to continue, we are obliged to fall into coldness or hatred, at which we arrive as we pass through the gate of jealousy.—Celsus, the illustrious physician, who was a master of the knowledge of human nature, tells us that a man who is become more corpulent than is usual with him, should be in apprehensions of falling sick, because things in this world being inconstant, he cannot continue long in his usual exuberance of health. In like manner, the intelligent observer, when he sees a man the slave of excessive and extravagant love, knows that it cannot long be maintained in the same state. We might here introduce the similitude of sheet iron stoves; soon hot and soon cold again.

A person excited by a strong passion, cannot judge fairly. The mind perplexed with difficulties, and unable to separate the tangled web, is brought into wild disorder, and is subject to continual vacillation. After having combated appearances, and cut off one of the heads of the hydra, it yields again to the whimsies of love; takes chimeras for truths, and the hydra reproduces ten heads for the one it had lost. Then again seeking by all methods to disengage itself from the doubts it has conjured up, curiosity is roused, and examines every trifling circumstance. The object is watched with a scrutinizing and severe espionage. This extravagant mode of proceeding renders the matter worse, and instead of effecting a cure, aggravates the disorder. This is what the ancients intended to convey by the fable they have narrated, that Vulcan disgusted with the infidelities of his wife, resolved to revenge himself upon her by proclaiming his jealousy in the presence of all the gods, expecting them to espouse his cause. But this public disclosure brought him into disgrace among them, and they drove him from Heaven, and his fall to earth brought upon him the discomfort of a broken limb and perpetual lameness. Such is the fate of the jealous; for the sake of exposing the frailty of their wives, they draw upon themselves the derision of the world, and fix a lasting stain upon their own reputation.

They who are accustomed from youth to control their passions, may with ease prevent them from quickening into tumultuous precipitation. Julius Cesar had such force of mind, that, though he had sufficient cause for jealousy, he never succumbed to this horrible passion. That illustrious man did not clamor in public about his domestic injuries. He knew that if he did, even boys would deride him.

Women are by nature more subject to jealousy than men. Being more feeble, they stand in need of masculine protection and succor, and are apprehensive of losing the affection of one from whom they expect them; and as they are also more constant than men, the stream of their love flowing constantly towards the same object wears a deeper channel, and we have observed that jealousy is seldom the attendant of any love but that which is strong and ardent.

Great minds can generally, by the force of reason, resist jealousy, which they receive only at the gate, without admitting it into the mansion. A prudent man, says Aristotle, ought to know the honor that is due to his wife, his children, and himself, and not wilfully bring any cloud over it, to obscure its brilliancy.

Having in this chapter been led a little out of my way by the consideration of a passion which is a blot upon love's escutcheon, I shall in my next chapter inquire whether the gay and frolicsome, or the timid and diffident, are most ardent in their attachments; and shall also offer some considerations on the question which is the easier, to gain the affection of a female or to retain it.

BRADDOCK'S DEFEAT.—We extract, to-day, from the appendix to Sparks's edition of the writings of Washington, a notice of the French account of this affair, which will be found interesting. It corresponds generally with that given by Gen. Lafayette, of the same affair, while last in this country, but differs in one point. It seems Captain Beaujeau, who suggested and led the expedition from Fort Du Quense, was killed, and that the victory was completed by Capt. Dumas; and it must have been from the latter that the Monsieur Du Contrecoeur snatched the laurels.—[Pittsburg Gaz.]

"No circumstantial account of this affair has ever been published by the French, or has it hitherto been known from any authentic source what numbers were engaged on their side. Washington conjectured, as stated in his letters, that there were no more than three hundred, and Dr. Franklin, in his account of the battle, considers them at most as not exceeding four hundred. The truth is, there was no accurate information on the subject, and writers have been obliged to rely on conjecture.

In the archives of the *War Department*, at Paris, I found three separate narratives of this event, written at the time, all brief and imperfect, but one of them apparently drawn up by a person on the spot. From these, I have collected the following particulars:

M. de Contrecoeur, the commandant of Fort Du Quense, received intelligence of the arrival of Gen. Braddock and the British regiments in Virginia. After his removal from Will's Creek, French and Indian scouts were constantly abroad, who watched his motions, reported the progress of his march, and the route he was pursuing. His army was represented to consist of three thousand men. M. de Contrecoeur was hesitating what measures to take, believing his small force wholly inadequate to encounter so formidable an army, when M. de Beaujeau, a captain in the French service, proposed to head a detachment of French and Indians, and meet the enemy in their march. The consent of the Indians was first to be obtained. A large body of them was then encamped in the vicinity of the Fort, and M. de Beaujeau opened to them his plan, and requested their aid. This they at first declined, giving as a reason the superior force of the enemy, and the impossibility of success. But at the pressing solicitation of M. de Beaujeau, they agreed to hold a council on the subject, and to talk with him again the next morning. They still adhered to their first decision, and when M. de Beaujeau went out among them to inquire the result of their deliberation, they told him a second time that they could not go. This was a severe disappointment to M. de Beaujeau, who had set his heart upon the enterprise, and was resolved to prosecute it. Being a man of great good nature, affability, and ardor, and much beloved by the savages, he said to them—"I am determined to go out and meet the enemy. What! will you suffer your father to go out alone? I am sure we shall conquer." With this spirited harangue, delivered in a manner that pleased the Indians, and won upon their confidence, he subdued their unwillingness, and they agreed to accompany him.

It was now the 7th of July, and news came that the English were within six leagues of the Fort. This day and the next were spent in making preparations, and reconnoitring the ground for attack. Two other captains, Dumas and Liguery, were joined with M. de Beaujeau, and also four lieutenants, six ensigns, and two cadets. On the morning of the 9th they were all in readiness, and began their march at an early hour. It seems to have been their first intention to make a stand at the ford, and annoy the English while crossing the river, and then retreat to the ambuscade on the side of the hill where the contest actually commenced. The trees on the bank of the river afforded a good opportunity to effect this manœuvre, in the Indian mode of warfare, since the artillery could be of little avail against an enemy, where every man was protected by a tree, and at the same time the English would be exposed to a point blank musket shot in fording the river. As it happened, however, M. de Beaujeau and his party did not arrive in time to execute this part of the plan.

The English were preparing to cross the river, when the French and Indians reached the defiles on the rising ground, where they posted themselves, and waited till Braddock's advanced columns came up. This was a signal for the attack, which was made at first in front, and repelled by so heavy a discharge from the British, that the Indians believed it proceeded from artillery, and showed symptoms of wavering and retreat. At this moment, M. de Beaujeau was killed, and the command devolving on M. Dumas, he showed great presence of mind in rallying

the Indians, and ordered his officers to lead them to the wings and attack the enemy in flank, while he with the French troops would maintain the position in front. This order was promptly obeyed, and the attack became general. The action was warm and severely contested for a short time; but the English fought in the European method, firing at random, which had little effect in the woods, while the Indians fired from concealed places, took aim, and almost every shot brought down a man. The English columns soon got into confusion; the yell of the savages, with which the woods resounded, struck terror into the hearts of the soldiers, till at length they took to flight, and resisted all the endeavors of their officers to restore any degree of order in their escape. The rout was complete, and the field of battle was left covered with the dead and wounded, and all the artillery, ammunition, provisions, and baggage of the English army. The Indians gave themselves up to pillage, which prevented them from pursuing the English in their flight.

Such is the substance of the accounts written at the time by the French officers, and sent home to their government. In regard to the numbers engaged, there are some slight variations in the three statements. The largest number reported is two hundred and fifty French and Canadians, and six hundred and forty-one Indians; and the smallest, two hundred and thirty-three French and Canadians, and six hundred and forty Indians. If we take a medium, it will make the whole number led out by M. de Beaujeau at least eight hundred and fifty. In an imperfect return, three officers were stated to be killed, and four wounded; about thirty soldiers and Indians killed, and as many wounded.

When these facts are taken into view, the result of the action will appear much less wonderful, than has generally been supposed. And this wonder will be still diminished, when another circumstance is recurred to, worthy of particular consideration, and that is, the shape of the ground on which the battle was fought. This part of the description, so essential to the understanding of military operations, and above all in the present instance, has never been touched upon, it is believed, by any writer. We have seen that Braddock's advanced columns, after crossing the valley extending for nearly half a mile from the margin of the river, began to move up a hill, so uniform in its ascent, that it was little else than an inclined plane of a somewhat crowning form. Down this inclined surface extended two ravines, beginning near together at about one hundred and fifty yards from the bottom of the hill, and proceeding in different directions till they terminated in the valley below. In these ravines the French and Indians were concealed and protected. At this day they are from eight to ten feet deep, and sufficient in extent to contain at least a thousand men. At the time of the battle, the ground was covered with trees and long grass, so that the ravines were entirely hidden from view, till they were approached within a few feet. Indeed, at the present day, although the place is cleared from trees, and converted into pasture, they are perceptible only at a very short distance. By this knowledge of the peculiarities of the battle ground, the mystery, that the British conceived themselves to be contending with an invisible foe, is solved. Such was literally the fact. They were so paraded between the ravines, that their whole front and right flank were exposed to the incessant fire of the enemy, who discharged their muskets over the edge of the ravines, concealed during that operation by the grass and bushes, and protected by an invincible barrier below the surface of the earth. William Butler, a veteran soldier still living (1832), who was in this action, and afterwards at the Plains of Abraham, said to me, "We could only tell where the enemy were by the smoke of their muskets." A few scattering Indians were behind trees, and some were killed in venturing out to take scalps, but much the larger portion fought wholly in the ravines.

[From the *Detroit Courier*.]

TECUMSEH.—The following incident in the career of this remarkable savage, which we do not recollect to have seen published, may not be altogether uninteresting to our readers, though we fail to embody it in the glowing language of an eye-witness by whom we chanced to hear it narrated. We give it with the more readiness, well knowing the importance attached by the public to any occurrence, however slight, serving to illustrate the character of a distinguished individual; and such the self-styled "King of the Woods" is universally allowed to have been, though border traditions have darkened the policy and patriotism of the native warrior with the deeper pen-

The train of events immediately succeeding the memorable victory of Lake Erie on the 13th of September, 1813, are still fresh in the memory of many of our inhabitants. Among them was the evacuation of Fort Malden by the British, notwithstanding the earnest counsel of Tecumseh that it should be maintained to the last; at the same time proposing to skirt the forest below with his "braves," and foot by foot to dispute the progress of the assailants. It was a bright autumnal day when the army of Gen. Harrison, under the escort of Commodore Perry's fleet sailed from Put-in-Bay, for the purpose of occupying that important post. The warlike array of the little squadron still scored with the marks of the recent engagement; the fluttering of pennants and waving of the battle flags; and the files of soldiery crowding the boats, with their burnished muskets throwing back the glitter of the sun were described as having formed a truly animating and imposing spectacle. Their course lay along that part of the Lake which had been the scene of conflict but ten days previous, and terrible mementoes of that bloody victory still surrounded them in the floating bodies of the dead, blackened and mangled as they were tossed from the decks, the red coat of the Briton contrasted with the grey dress of the marine, or the blue jacket of the American tar. As they drew near the Canadian shore, an object was discernible flitting along the beach, now dashing with rapid movement down the entire front of the approaching fleet, and anon pausing as if to reconnoitre. A nearer view revealed a trim and athletic horseman mounted on an Indian pony, dressed in belted hunting frock of smoked deer skin, with the appendage of long gaiters strapped below the knee, and the richly ornamented moccasin. It was the celebrated Tecumseh, who, notwithstanding the flight of his white ally, had lingered behind to ascertain the force of the invading enemy, and who, after singly confronting their floating batteries till satisfied of their numerical strength, leisurely withdrew as if in dignified defiance from the shore, to communicate the intelligence to the remaining inmates of the Fort.

Had the dauntless spirit and quick sighted sagacity of the Indian warrior been shared by his British brother, it is probable that our troops, after a harassing march to Malden, would have met with a warmer reception than they experienced from a few bedridden paralytics and a group of defenceless women and children.

While upon this subject it may not be amiss to advert to a scene which formed the concluding portion of the same narrative, though not materially connected with the name of Tecumseh. A part of the Kentucky troop of horse under the command of Col. Johnson, still following upon the tracks of General Proctor, after his discomfiture at the forks of the Thames, took possession of the Moravian town on that river which had but recently been evacuated by the enemy. These wild and fearless men to whom peril was but pastime, and who seem to have resembled in some particulars the tameless horsemen of the Don, were already rendered half furious at the cold and savage butcheries which had spilt the best blood of Kentucky like water. When orders were therefore given to fire the rows of the deserted log-cabins which constituted the town, these wild riders in the mere wantonness of daring scoured furiously through the streets, walled in as they were on either side by sheets of flame; their vicious and half-tamed animals to all appearance equally elated with the strange glee of their masters. The very appearance of these mad warriors must have been semi-barbarous, bearded and browned as they were by exposure, and attired in the costume of the back-woodsmen, with their carbines slung over their shoulders, the long hunting knife thrust into the belt of the deer-skin frock, and the canteen slung from the bear-skin saddle bows. This, with the roaring of the conflagration, the crash of the falling dwellings, the shouts of these desperate troopers, and the clattering of their horses as they burst ever and anon through the smoke and flames, must have presented as singular and stirring a picture as has ever been sketched even by the pencil of romance.

French Shop Girls.—The following piquant description of a Parisian Shop Keeper is given by Mr. Fay, in one of his late letters from France, published in the *New York Mirror*:

"Next to the quay I should rank the women, that extensive class of them I mean, who keep the shops. There is nothing under heaven like a young French girl behind a counter; she is thoroughly skilled in manner. It is brilliant and irresistible. They are graceful, pretty, attentive, respectfully flattering, and always good humored; and so different from those

honest gentlemen behind the counters of Maiden lane and Broadway, who tell you, "the article cost three and sixpence, but you can have it for three shillings," that one scarcely knows how to treat them. Their air resembles that of a charming belle in the meridian of a drawing room; mere pecuniary calculations—such paltry matters as *demi francs* and *sous* are the last things that enter my head; and I stand scraping and bowing and stammering interjections in vile French, and pay ten times what my purchase is worth from mere politeness.

"They are arrant sirens after all: and have several times beguiled me into bargains like that of Franklin's whistle, for most of them consider it disreputable not to cheat a foreigner. Discovering that their obliging air was but a lure, and that my polite simplicity only plunged me deeper into the snare, I resolved to resist their demands with the bluntness of one who knew rather too much to be taken in so readily. Having occasion, therefore, for a pair of gloves, I suffered the counter to be heaped with untied packages—leather, kid and silk, cotton, linen, buckskin of every size, shape and color. The young girl toiled on with the same engaging smile. It was all in vain. Nothing would do. I turned to depart, when her perfectly cheerful "Ah, monsieur cannot suit himself. I am very sorry—pardon—bon jour Monsieur," arrested me on the threshold. I felt like a scoundrel. I had thrown her shop into confusion. It was but just to take something. I selected a trifle, worth perhaps two shillings, and handed her a dollar. She threw the glittering coin into the drawer, and gave me the sweetest smile in the world, and I bowed out with her "bon jour, monsieur," ringing in my ears like the tones of a flute. There is no sound in nature like the "bon jour, monsieur," of a pretty French woman, after she has cheated you out of a dollar. It is actually delightful—perfect music—but it costs you more than the opera."

[FOR THE AMERICAN.]
THE HEBREW REQUIEM.

"They made a funeral oration at the grave, after which they prayed, then turning the face of the deceased towards Heaven, they said—'Go in peace.'—[Hebrew Antiquities.]

Go thou in peace—we may not bid thee linger
Amid the sunlight and the gloom, of earth,
Where ev'ry joy is touched by sorrow's finger,
And tears succeed the brightest hour of mirth;
Thine upward gaze is fixed upon that dwelling
Where sin and sorrow never more are known,
And seraph lips, the loud Hosanna swelling,
Have caught the music of celestial tones.
Go thou in peace—thy home on earth now leaving
In the lone chamber of the dead to dwell;
Thou hast no portion in the sorrow heaving
The hearts whose anguish tears but feebly tell—
A path of light and gladness is before thee,
The hope of Israel in fruition thine,
And thou wilt gaze upon the beams of glory
Around the throne of Israel's God that shine.
Go thou in peace, why are the loved ones weeping
Around the spot where now thy form is lain,
There is no cause for grief that thou art sleeping,
Free from each trial, and untouched by pain;
Thy path has been through many a scene of sorrow,
Thy weary form has needed this repose;
Calm be thy rest until the eternal morrow
Its light and glory on thy dwelling throws.
Go thou in peace—temptation cannot sever
The tie that now unites thee to thy God;
The voice of sin—of unbelief—can never
Enter the precincts of thy low abode:
We leave thee here with mingled joy and sadness,
Our hearts are weak, our faith is low and dim,
Yet to the Lord we turn with chastened gladness,
And yield our friend—our brother up to HIM.

M. J. W.

SURVEYORS' INSTRUMENTS.

1^o Compasses of various sizes and of superior quality warranted.
Leveling Instruments, large and small sizes, with high magnifying powers with glasses made by Troughton, together with a large assortment of Engineering Instruments, manufactured and sold by E. & G. W. BLUNT, 154 Water street, corner of Maidenlane, Hudson, New-York, January 29, 1833.

1^o TOWNSEND & DURFEE, of Palmyra, Manufacturers of Railroad Rope, having removed their establishment to Hudson, under the name of Durfee, May & Co. offer to supply Rope of any required length (without splice) for inclined planes of Railroads at the shortest notice, and deliver them in any of the principal cities in the United States. As to the quality of Rope, the public are referred to J. B. Jervis, Eng. & H. R. Co., Albany; or James Archibald, Engineer Hudson and Delaware Canal and Railroad Company, Carbonia, Luzerne county, Pennsylvania.

Hudson, Columbia county, New-York,

LOCOMOTIVE ENGINES.

1^o THE AMERICAN STEAM CARRIAGE COMPANY, of PHILADELPHIA, respectfully inform the public, and especially Railroad and Transportation Companies, that they have become sole proprietors of certain improvements in the construction of Locomotive Engines, and other railway carriages, secured to Col. Stephen H. Long, of the United States Engineers, by letters patent from the United States, and that they are prepared to execute any orders for the construction of Locomotive Engines, Tenders, &c. with which they may be favored, and pledge themselves to a punctual compliance with any engagements they may make in reference to this line of business.

They have already in their possession the requisite apparatus for the construction of three classes of engines, viz. engines weighing four, five, and six tons.

The engines made by them will be warranted to travel at the following rates of speed, viz. a six ton engine at a speed of 15 miles per hour; a four ton engine at a speed of 22 1/2 miles per hour. Their performance in other respects will be warranted to equal that of the best English engines of the same class, with respect not only to their efficiency in the conveyance of burthens, but to their durability, and the cheapness and facility of their repairs.

The engines will be adapted to the use of anthracite coal, pine wood, coke, or any other fuel hitherto used in locomotive engines.

The terms shall be quite as favorable, and even more moderate, than those on which engines of the same class can be procured from abroad.

All orders for engines, &c. and other communications in reference to the subject, will be addressed to the subscriber, in the city of Philadelphia, and shall receive prompt attention.

By order of the Company,

WILLIAM NORRIS, Secretary.

December 2d, 1833.

For further information on this subject see No. 49, page 772, Vol. 2, of Railroad Journal.

RAILWAY IRON.

1^o Ninety-five tons of 1 inch by $\frac{1}{2}$ inch, 200 do. 1 $\frac{1}{2}$ do. do. 40 do. 1 $\frac{1}{2}$ do. do. 500 do. 2 do. do. 500 do. 2 $\frac{1}{2}$ do. do. soon expected.

Flat Bars in lengths of 14 to 15 feet counter sunk holes, end cut at an angle of 45 degrees with splicing plates, nails to suit.

250 do. of Edge Rails of 36 lbs. per yard, with the requisite chairs, keys and pins.

Wrought Iron Rims of 30, 33, and 36 inches diameter for Wheels of Railway Cars, and of 60 inches diameter for Locomotive wheels.

Axes of 2 $\frac{1}{2}$, 3 $\frac{1}{2}$, 4 $\frac{1}{2}$, 5 $\frac{1}{2}$, 6 $\frac{1}{2}$, 7 $\frac{1}{2}$, and 8 $\frac{1}{2}$ inches diameter for Rail Cars and Locomotives of patent iron.

The above will be sold free of duty, to State Governments and Incorporated Governments, and the Drawback taken in part payment.

A. & O. RALSTON.

9 South Front street, Philadelphia.

Models and samples of all the different kinds of Rails, Chairs, Pins, Wedges, Spikes, and Splicing Plates, in use, both in this country and Great Britain, will be exhibited to those disposed to examine them.

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ENGINEERING AND SURVEYING INSTRUMENTS.

1^o The subscriber manufactures all kinds of Instruments in his profession, warranted equal, if not superior, in principles of construction and workmanship to any imported or manufactured in the United States; several of which are entirely new: among which are an Improved Compass, with a Telescop attached, by which angles can be taken with or without the use of the needle, with perfect accuracy—also, a Railroad Goniometer, with two Telescopes—and a Levelling Instrument, with a Goniometer attached, particularly adapted to Railroad purposes.

WM. J. YOUNG,

Mathematical Instrument Maker, No. 9 Dock street, Philadelphia.

The following recommendations are respectfully submitted to Engineers, Surveyors, and others interested.

Baltimore, 1832.

In reply to thy inquiries respecting the Instruments manufactured by thee, now in use on the Baltimore and Ohio Railroad. I cheerfully furnish thee with the following information. The whole number of Levels now in possession of the department of construction of thy make is seven. The whole number of the "Improved Compass" is eight. These are all exclusive of the number in the service of the Engineer and Gravitation Department.

Both Levels and Compasses are in good repair. They have in fact needed but little repairs, except from accidents to which all instruments of the kind are liable.

I have found that thy patterns for the levels and compasses have been preferred by my assistants generally, to any others in use, and the Improved Compass is superior to any other description of Goniometer that we have yet tried in laying the rails on this road.

This instrument, more recently improved with a reversing telescope, in place of the vane sights, leaves the engineer scarcely any thing to desire in the formation or convenience of the Compass. It is indeed the most completely adapted to later angles of any simple and cheap instrument that I have yet seen, and I cannot but believe it will be preferred to all others now in use for laying of rails—and in fact, when known, I think it will be as highly appreciated for common surveying.

Respectfully thy friend,
JAMES P. STABLER, Superintendent of Construction of Baltimore and Ohio Railroad.

Philadelphia, February, 1833.

Having for the last two years made constant use of Mr. Young's "Patent Improved Compass," I can safely say I believe it to be much superior to any other instrument of the kind, now in use, and as such most cheerfully recommend it to Engineers and Surveyors.

E. H. GILL, Civil Engineer.

Germantown, February, 1833.

For a year past I have used Instruments made by Mr. W. J. Young, of Philadelphia, in which he has combined the properties of a Theodolite with the common Level.

I consider these Instruments admirably calculated for laying out Railroads, and can recommend them to the notice of Engineers as preferable to any others for that purpose.

HENRY R. CAMPBELL, Eng. Philad.,
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STEPHENSON,

Builder of a superior style of Passenger Cars for Railroads
No. 264 Elizabeth street, near Bleecker street,
New-York.

1^o RAILROAD COMPANIES would do well to examine these Cars; a specimen of which may be seen on that part of the New-York and Harlem Railroad, now in operation.

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RAILROAD CAR WHEELS, BOXES AND
AND OTHER RAILROAD CASTINGS.

1^o Also, AXLES furnished and fitted to wheels complete at the Jefferson Cotton and Wool Machine Factory and Foundry, Paterson, N. J. All orders addressed to the subscribers at Paterson, or 60 Wall street, New-York, will be promptly attended to. Also, CAR SPRINGS.

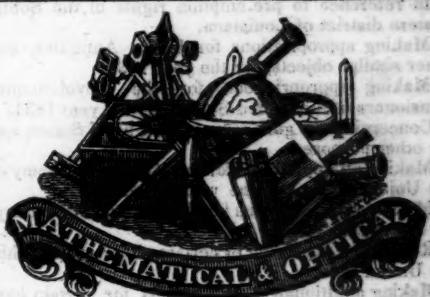
Also, Flange Tires turned complete.

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NOVELTY WORKS,

Near Dry Dock, New-York.

1^o THOMAS B. STILLMAN, Manufacturer of Steam Engines, Boilers, Railroad and Mill Work, Lathes, Presses, and other Machinery. Also, Dr. Not's Patent Tubular Boiler, which are warranted, for safety and economy, to be superior to any thing of the kind heretofore used. The fullest assurance is given that work shall be done well, and on reasonable terms. A share of public patronage is respectfully solicited.



INSTRUMENTS.

SURVEYING AND NAUTICAL INSTRUMENT
MANUFACTORY.

1^o EWIN & HEARTTE, at the sign of the Quadrant, No. 53 South street, one door north of the Union Hotel, Baltimore, beg leave to inform their friends and the public, especially Engineers, that they continue to manufacture to order and keep for sale every description of Instruments in the above branches, which they can furnish at the shortest notice, and on fair terms. Instruments repaired with care and promptitude.

For proof of the high estimation on which their Surveying Instruments are held, they respectfully beg leave to tender to the public perusal, the following certificates from gentlemen of distinguished scientific attainments.

To Ewin & Heartte.—Agreeably to your request made some months since, I now offer you my opinion of the Instruments made at your establishment, for the Baltimore and Ohio Railroad Company. This opinion would have been given at a much earlier period, but was intentionally delayed, in order to afford a longer time for the trial of the Instruments, so that I could speak with the greater confidence of their merits, if such they should be found to possess.

It is with much pleasure I can now state that notwithstanding the Instruments in the service procured from our northern cities are considered good, I have a decided preference for those manufactured by you. Of the whole number manufactured for the Department of Construction, to wit: five Levels, and five of the Compasses, not one has required any repairs within the last twelve months, except from the occasional imperfection of a screw, or from accident, to which all Instruments are liable. They possess a firmness and stability, and at the same time a neatness and beauty of execution, which reflect much credit on the artists engaged in their construction.

I can with confidence recommend them as being worthy the notice of Companies engaged in Internal Improvements, who may require Instruments of superior workmanship.

JAMES P. STABLER,
Superintendent of Construction of the Baltimore and Ohio Railroad.

I have examined with care several Engineers' Instruments of your Manufacture, particularly Spirit levels, and Surveyor's Compasses; and take pleasure in expressing my opinion of the excellence of the workmanship. The parts of the levels appeared well proportioned to secure facility in use, and accuracy and permanency in adjustments.

These Instruments seemed to me to possess all the modern improvement of construction, of which so many have been made within these few years; and I have no doubt but they will give every satisfaction when used in the field.

WILLIAM HOWARD, U. S. Civil Engineer.

Baltimore, May 1st, 1833.

To Messrs Ewin and Heartte.—As you have asked me to give my opinion of the merits of those Instruments of your manufacture which I have either used or examined, I cheerfully state that as far as my opportunities of my becoming acquainted with their qualities have gone, I have great reason to think well of the skill displayed in their construction. The neatness of their workmanship has been the subject of frequent remark by myself, and of the accuracy of their performance I have received satisfactory assurance from others, whose opinion I respect, and who have had them for a considerable time in use. The efforts you have made since your establishment in this city, to relieve us of the necessity of sending elsewhere for what we may want in our line, deserve the unqualified approbation and our warm encouragement. Wishing you all the success which your enterprise so well merits, I remain, yours, &c.

B. H. LATROBE,
Civil Engineer in the service of the Baltimore and Ohio Railroad Company.

A number of other letters are in our possession and might be introduced, but are too lengthy. We should be happy to submit them, upon application, to any person desirous of perusing the same.

23d CONGRESS....1st Session.

The following is a list of the acts of public importance passed at this session.

For the relief of John Percival, Master Commandant in the United States Navy.

Making appropriations, in part, for the support of Government for the year 1834.

Making certain allowances, and granting certain arrears to the Captains and Subalterns of the U. S. Corps of Marines.

To grant to the State of Ohio certain lands for the support of Schools, in the Connecticut Western Reserve.

For the relief of sundry citizens of the United States who have lost property by the depredations of certain Indian tribes.

Making appropriations for the Indian Department for the year one thousand eight hundred and thirty-four.

Making appropriations for the Naval service, for the year one thousand eight hundred and thirty-four.

Authorizing the Secretary of War to establish a Pension Agency in the town of Decatur, in the State of Alabama, and to provide for paying certain pensions in said town of Decatur.

In reference to pre-emption rights in the Southeastern district of Louisiana.

Making appropriations for Indian Annuities, and other similar objects, for the year 1834.

Making appropriations for the Revolutionary Pensioners of the United States, for the year 1834.

Concerning the gold coins of the United States, and for other purposes.

Making appropriations for the Military Academy of the United States, for the year 1834.

Making appropriations for the support of the army, for the year 1834.

Regulating the value of certain silver coins within the United States.

Making additional appropriations for certain harbors, and removing obstructions in the mouths of certain rivers, for the year 1834.

Making appropriations for the civil and diplomatic expenses of Government, for the year 1834.

To establish an additional land office in Arkansas.

Regulating the value of certain foreign gold coins within the United States.

To extend the time allowed for the discharge of the duties of the commission, for carrying into effect the Convention with France.

To change the boundary between the Southeastern and Western land districts in the Territory of Michigan, and for other purposes.

To revive and amend "An act for the relief of certain insolvent debtors of the United States," passed on the second day of March, eighteen hundred and thirty-one, and an act, in addition thereto, passed on the fourteenth of July, 1832.

Supplementary to the act entitled "An act to carry into effect the Convention between the United States and his Majesty the King of the Two Sicilies, concluded at Naples on the fourteenth day of October, 1832.

To enable the Secretary of State to purchase the papers and books of General Washington.

To authorize the removal of the Custom House from Magnolia to St. Marks in Florida.

To equalize representation in the Territory of Florida, and for other purposes.

For the re-appropriation of an unexpended balance of a former appropriation for the payment of the Georgia Militia Claims, for the year one thousand seven hundred and ninety-two, and one thousand seven hundred and ninety-three, and one thousand seven hundred and ninety-four.

Giving the consent of Congress to an agreement or compact entered into between the State of New York and the State of New Jersey, respecting the territorial limits and jurisdictions of the State.

Making additional appropriations for the Armory at Harper's Ferry, for the year 1834.

To amend an act passed on the twenty-ninth day of May, 1830, entitled "An act for the relief of the owners of sundry vessels sunk for the defence of Baltimore."

Making appropriations to carry into effect certain Indian treaties and for other purposes.

To attach the territory of the United States West of the Mississippi river and North of the State of Missouri, to the Territory of Michigan.

To provide for the organization of the Department of Indian Affairs.

Making appropriations for certain fortifications of the United States for the year 1834.

Making appropriations for the Public Buildings and grounds, and for other purposes.

For the better organization of the United States Marine corps.

To procure a bust in marble, of the late Chief Justice Ellsworth.

For the completion of the road from a point opposite to Memphis, in the State of Tennessee, to Little Rock, in the Territory of Arkansas.

Concerning the duties on lead.

Authorizing the selection of certain Wabash and Erie Canal lands in the State of Ohio.

To establish a port of entry at Natchez, in Mississippi, and creating certain ports of delivery, and for other purposes.

Concerning naval pensions and the navy pension fund.

Authorizing the President of the United States to cause certain roads to be opened in Arkansas.

To suspend the operation of certain provisos of an act to alter and amend the several acts imposing duties on imports," approved 14th July, 1832.

To aid in the construction of certain roads in the Territory of Michigan.

To enable the President to make an arrangement with the Government of France, in relation to certain French Seamen killed or wounded at Toulon, and their families.

Limiting the time of advertising the sale of the Public Lands.

For the benefit of the City of Washington.

To create two additional Land Districts in the State of Illinois, and two new Land Districts north of said State, in the Territory now attached to Michigan, which lies between Lake Michigan and the Mississippi river.

For the continuation and repair of the Cumberland road.

An act in addition to the "act more effectually to provide for the punishment of certain crimes against the United States and for other purposes;" approved March 3d, 1825.

To amend an act entitled "An act to annex a part of the State of New Jersey to the collection district of New York; to remove the office of collector of Niagara to Lewistown; to make Cape St. Vincent, in the District of Sackett's Harbour, a port of delivery; and out of the Districts of Miami and Mississippi, to make two new Districts, to be called the Districts of Sandusky and Teche, and for other purposes.

Authorizing the Governors of the several States to transmit by mail certain books and documents.

Authorizing a sum of money to be distributed among the officers and crew of the late private armed brig General Armstrong.

Granting a township of land to certain exiled Poles from Poland.

Authorizing the payment of bounty in certain fishing vessels lost at sea.

For the relief of the Roman Catholic church at St. Louis, Missouri.

For the relief of a part of the crew of the brig Sarah George.

To regulate trade and intercourse with the Indian tribes, and to preserve peace on the frontiers.

Making appropriations for building light houses, light boats, beacons, and monuments, for the year 1834.

Making appropriation for the improvement of the navigation of the Hudson river, in the State of New York.

To authorize the Secretary of the Treasury to compromise the claims of the United States against the late firm of Minut and Champlain and their securities.

For the relief of J. Haggerty & David Austen, of N. York.

For the relief of John Hone & Sons, of New York.

For the relief of the widow and heirs of Felix St. Vrain.

To continue further in force "An act to authorize the extension, construction and use of a lateral branch of the Baltimore and Ohio Rail-road into and within the District of Columbia."

To authorize Gazaway B. Lamar to import an iron steamboat, in detached parts, with the necessary machinery, tools, and working utensils therefor, into the United States, free from duty, and to provide for the remission of the same.

To change the time for commencing the session of the Courts of the United States in the District of Delaware.

To carry into effect the 14th article of the Treaty of the 8th of January, 1821, with the Creek nation of Indians, so far as relates to the claims of the citizens of Georgia against said Indians, prior to 1822.

Repealing certain acts of the Legislative Council of the Territory of Florida.

Authorizing a road to be cut out from the northern boundary of the Territory of Florida, by Marianna, to the town of Apalachicola, within the said Territory.

To mark and open a road from Columbia to Little Rock, in the Territory of Arkansas.

To provide for rebuilding the Frigate Congress.

Authorizing the Secretary of the Navy to make experiments for the safety of the Steam Engine.

To authorize the President of the United States to direct transfers of appropriations in the naval service, under certain circumstances.

Authorizing the purchase of live oak frames for a frigate and sloop of war, and for other purposes.

Authorizing the construction of a Bridge across the Potomac, and repealing all acts already passed in relation thereto.

Increasing the salaries of the Judges of the United States for the Territories of Michigan, Arkansas, and Florida.

To authorize an extra session of the Legislative Council of the Territory of Michigan.

To prohibit the Corporations of Washington, Georgetown and Alexandria, in the District of Columbia, from issuing promissory notes or bills of any denomination less than ten dollars, after the period therein mentioned, and for the gradual withdrawal from circulation of all such notes and bills.

Supplementary to the act to amend the several acts respecting copy-rights.

To establishing the northern boundary line of the country purchased of the Chickasaws by the treaty of 1832.

Making compensation for certain diplomatic services, and for other purposes.

To relinquish the reversionary interest of the United States in a certain Indian reservation lying between the rivers Mississippi and Des Moines.

To provide for the payment of claims for property destroyed by the enemy while in the military service of the United States, during the late war with the Indians on the frontiers of Illinois and Michigan Territory.

To complete the improvements of Pennsylvania Avenue.

Concerning tonnage duty on Spanish vessels.

Resolution directing certain Books to be procured and furnished members of the 23d Congress.

Giving the right of way through the property of the United States at Harper's Ferry, to the Winchester and Potomac Railroad Company.

For distributing the returns of the last Census.

Joint Resolution manifesting the sensibility of the two Houses of Congress and of the Nation, on the occasion of the decease of General Lafayette.

NOTICE TO MANUFACTURERS.

SIMON FAIRMAN, of the village of Lansingburgh, in the county of Rensselaer, and state of New-York, has invented and put in operation a Machine for making Wrought Nails with square points. This machine will make about sixty 6d nails, and about forty 10d nails in a minute, and in the same proportion larger sizes, even to spikes for ships. The nail is hammered and comes from the machine completely heated to redness, that its capacity for being clenched is good and sure. One horse power is sufficient to drive one machine, and may easily be applied where such power for driving machinery is in operation. Said Fairman will make, vend and warrant machines as above, to any persons who may apply for them as soon as they may be made, and on the most reasonable terms. He also desires to sell one half of his patent right for the use of said machines throughout the United States. Any person desiring further information, or to purchase, will please to call at the machine shop of Mr. John Humphrey, in the village of Lansingburgh.—August 15, 1833.

A29 of R M & F

PATENT RAILROAD, SHIP AND BOAT SPIKES.

The Troy Iron and Nail Factory keep constantly for sale a very extensive assortment of Wrought Spikes and Nails, from 3 to 10 inches, manufactured by the subscriber's Patent Machinery, which after five years successful operation and now almost universal use in the United States (as well as England, where the subscriber obtained a Patent,) are found superior to any ever offered in market.

Railroad Companies may be supplied with Spikes having countersink heads suitable to the holes in iron rails, to any amount and on short notice. Almost all the Railroads now in progress in the United States are fastened with Spikes made at the above named factory—for which purpose they are found invaluable, as their adhesion is more than double any common spike made by the hammer.

All orders directed to the Agent, Troy, N. Y., will be punctually attended.

HENRY BURDEN, Agent.

Troy, N. Y. July, 1831.

Spikes are kept for sale, at factory prices, by **I. & J. Townsend**, Albany, and the principal Iron Merchants in Albany and Troy; **J. I. Brower**, 223 Water street, New-York; **A. M. Jones**, Philadelphia; **T. Janvers**, Baltimore; **Degrand & Smith**, Boston.

P. S.—Railroad Companies would do well to forward their orders as early as practical, as the subscriber is desirous of extending the manufacturing so as to keep pace with the daily increasing demand for his Spikes.

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H. BURDEN.

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